PRODUCT CATALOGUE

- The Centenary Edition Celebrating 100 Years of Food Innovation







Dear Customer,

Crown National is celebrating its centenary year and it is with pride that I introduce the Centenary Edition of our product catalogue - the fourth since its inception. I am sure that you will find it informative and helpful; providing information, product ideas, hints and tips on processes, equipment and associated consumables that we supply to the meat and food industries.

As much as we respect and are proud of our history, our focus is on the future. We embrace and regard this milestone as the beginning of a new chapter in the life of our esteemed company.

Our vision has been to provide innovative solutions, in terms of products and services, to meet the challenges our customers face.

In order to fulfil this pledge, we recently completed the construction of our new Sauces and Marinades Operation as well as the new Centre of Innovation, Design and Technology where we have invested in the latest state-of-the-art technologies to support the innovations process through research and development. With our sights set on the future, we have embraced information technology throughout all facets of our business, including the use of social media as a means of communicating our products and services to the market and trust that you will find the links in this catalogue helpful and fun.

Our structures have been strengthened by appointing dynamic, enthusiastic and knowledgeable young staff members and we have empowered them to ensure the continuation of our vision into the future.

Food safety remains a major priority and we are committed to upholding the standards expected by the industry, giving you the assurance that our products are of the highest quality.

I thank you all for your continued support and on behalf of my team, I pledge our commitment to providing you with service based on our ethos of respect, honesty and integrity.

Remember "we're here to help".

Kind Regards

JOHN MORRIS

Managing Director





Providing Superior Products and Solutions

The roots of Crown National can be traced back to 1912 when a company called Newtown Tin Works was founded in the bustling village of Newtown to serve the exploding gold mining community in Johannesburg.

Newtown Tin became a company called Crown Mills which, by the late 1980s was a sizeable company serving predominantly the meat industry with spices, seasonings and butchery equipment. At this stage, across town in Doornfontein, there was a competitor by the name of National Spice Works. The dynamic Bidvest Group, then in its infancy, acquired both companies and amalgamated them – hence the name Crown National.

A third company, Columbit Foods, was subsequently added to the fold and the combined experience, expertise and synergies of these three companies bonded to make Crown National a leader in its field.

Our "We're Here To Help – First For Service" philosophy has stood us in good stead over the years, helping us to cement our relationships with customers and form "partnerships", working together in trust to our mutual benefit.

We are proud of our heritage and proud to be members of the Bidvest Group. We provide the industries which we serve, with products we are proud of, from facilities that we know are unequalled in Africa. We have highly qualified, dedicated and committed staff to provide superior product design and technological excellence to customers.

We realise that our future success is in direct proportion to our value as perceived by our customers. Crown National is therefore committed to a never ending quest to add value to our customers and their businesses.





www.crownnational.co.za



Johannesburg Branch and Factory Mart

31 Nguni Drive, Longmeadow West, Modderfontein

P.O. Box 3713, Edenvale, 1610 Tel: +27 11 201-9000

e-mail: jhb@crownnational.co.za

GPS: -26.107932 28.13118

Fax: +27 11 201-9180

Scan this QR code and go straight to the address on Google Maps





Alberton Factory Mart

Matrix Building Shop 2, 27 Louis Trichard Street Cnr Louis Trichard and 7th Avenue Alberton North Tel: +27 11 201-9044

GPS: -26.260023



28.12368

Scan this QR code and go straight to the address on Google Maps



Klerksdorp Branch and Factory Mart

15 Delver Street, Klerksdorp, 2570 Tel: +27 (0)18 462-7996 Fax: +27 (0)18 462-7995

GPS: -26.86999 26.666962









Pretoria North Factory Mart

924 Paul Kruger Street, Cnr Paul Kruger and Van Rensburg Streets Mayville

Tel: +27 11 201-9038 Fax: +27 12 335-4584

GPS: -25.700368 28.186026



Scan this QR code and go straight to the address on Google Maps

Bloemfontein Branch and Factory Mart

Shop 9, Megapark, Curie Avenue, Bloemfontein

P.O. Box 696, Bloemfontein, 9300

Tel: +27 51 430-0240 Fax: +27 51 430-0250

e-mail: blm@crownnational.co.za

GPS: -29.136006 26.203594



Scan this QR code and go straight to the address on Google Maps



Welkom Factory Mart

Unit 7, Koppie Alleen Road, Welkom, 9460

P.O. Box 57210, Pansig, 9465

Tel: +27 57 355 2699 Fax: +27 57 355 2677

e-mail: Welkom@crownnational.co.za

GPS: -27.983222 26.760442











Cape Town Branch and Factory Mart

2 Pepper Place, Rainbow Park Phase II, Montague Gardens P.O. Box 37281, Chempet, 7442 Tel: +27 21 527-6100

Fax: +27 21 527-6129

e-mail: ct@crownnational.co.za

GPS: -33.864465 18.514452



Scan this QR code and go straight to the address on Google Maps

BidFood Technologies

4 Pepper Place, Rainbow Park Phase II, Montague Gardens P.O. Box 37200, Chempet, 7442

Tel: +27 21 527 5000 Fax: +27 21 527 5023

GPS: -33.864465 18.514452

Scan this QR code and go straight to the address on Google Maps



Durban Branch and Factory Mart

95 Intersite Avenue, Umgeni Business Park, Durban

P.O. Box 74310, Rochdale Park, 4034

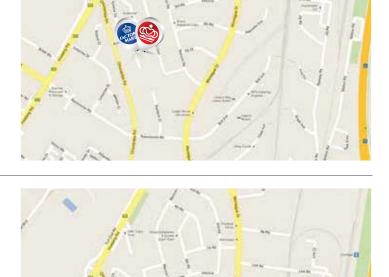
Tel: +27 31 263-0533 Fax: +27 31 263-0543

e-mail: dbn@crownnational.co.za

GPS: -29.809509 30.987003



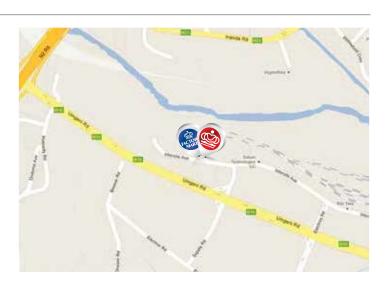
Scan this QR code and go straight to the address on Google Maps



BidFood

Technologies is

the manufacturing facility for So Good Foods marinades and sauces as well as Crown National savoury ingredients







Port Elizabeth Branch and Factory Mart

11 North Road, Northend, Port Elizabeth P.O. Box 1528, Port Elizabeth, 6000 Tel: +27 41 484-3221 Fax: +27 41 484-1949 e-mail: pe@crownnational.co.za

GPS: -33.940886 25.604796



Scan this QR code and go straight to the address on Google Maps

East London Factory Mart

83 Old Transkei Road, Nahoom, East London, 5201 Tel: +27 (0)43 735-3681 Fax: +27 (0)43 735-3678 e-mail: el@crownnational.co.za

GPS: -32.984908 27.920058



Scan this QR code and go straight to the address on Google Maps

Nelspruit Branch and Factory Mart

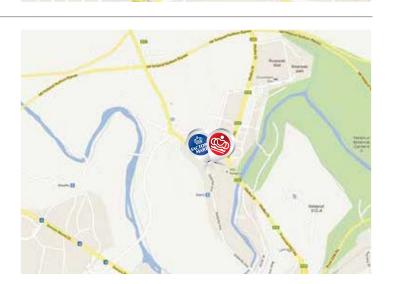
31 Waterfall Avenue, Riverside Industrial Park, Nelspruit P.O. Box 1673, Nelspruit, 1200 Tel: +27 13 752-2040 Fax: +27 13 752-7986

e-mail: nel@crownnational.co.za

GPS: -25.448748 30.95973







Crown National Agents



Margot Swiss (George)

1 Grens Street, George Industria, George

P.O. Box 158, George, 6530 Tel: +27 (0)44 871-2512 Fax: +27 (0)44 871-2615

e-mail: sales@margotswiss.co.za

GPS: -33.97189 22.473446



Scan this QR code and go straight to the address on Google Maps

Duroc (Polokwane)

29 Yster Street, Polokwane P.O. Box 726 Ladanna, 0704 Tel: +27 (0)15 293-1610 Fax: +27 (0)15 293-1617

e-mail: spiceworld@mweb.co.za

GPS: -23.885946 29.437491



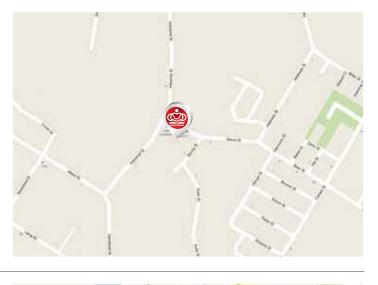
Scan this QR code and go straight to the address on Google Maps

Spectra (Queenstown)

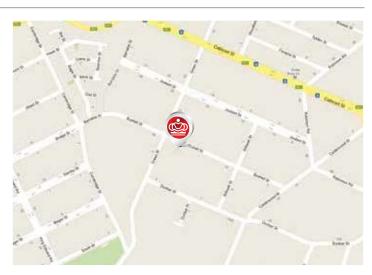
32 Bushell Street, Queenstown, 5319 P.O. Box 1164, Queenstown, 5320 Tel: +27 (0)45 838-1873 Fax: +27 (0)45 839-2356 e-mail: spices@spectra.bz

GPS: -31.896588 26.864641









Crown National Agents



Meat Masters (Vryheid)

106 East Street, Vryheid, 3100 P.O. Box 925, Vryheid, 3100 Tel: +27 (0)34 981-4222 Fax: +27 (0)34 980-9424

e-mail: angela@meatmaster.co.za patrick@meatmaster.co.za

GPS: -27.76771 30.798669



Scan this QR code and go straight to the address on Google Maps

Spice World (Lesotho)

1 Main North Road, Highway Shopping Centre, Opposite Lesotho High School, Maseru.

Tel: +266 58851717 Fax: +266 22326456

GPS: -29.314842 27.499981



Scan this QR code and go straight to the address on google maps

Crown Mills (Namibia)

Newcastle Street 42 A, Northern Industrial Area, Klein Windhoek

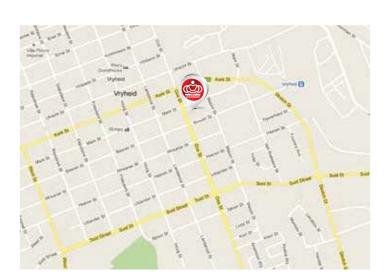
P.O. Box 11097, Klein Windhoek Tel: 00 264 612 32381

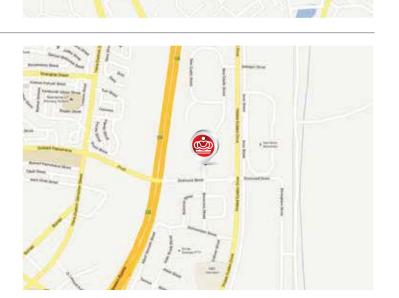
Fax: 00 264 612 346883-1610 e-mail: crownmills@iway.na

GPS: -22.525639 17.075222











Introduction

The BidFood Technologies Division is the manufacturing arm of Bidvest Food Group Southern Africa and operates from state-of-the-art factories in Montague Gardens, Cape Town and Longmeadow Johannesburg.

The BFT division serves every segment of the food industry including meat, fish, bakery and convenience, with functional food ingredients, ingredient systems, custom blends, marinades, sauces, herbs, spices, seasonings and bakery premixes.

BidFood Technologies represents numerous international ingredients' companies who not only provide world-class ingredients designed to fulfill specific applications in the food industry, but also provide technological support in the form of innovative formulation development, process engineering, system development and food safety.

OUR CORE COMPETENCIES INCLUDE:



Product design and innovation.



Research and development.



Long term strategic research in the field of functional food ingredients with local and international institutions such as Leatherhead UK and local universities.



Product and system research.



Procurement of food ingredients.



Manufacture of sauces.



Technical training to our staff and a technical consultancy service to our customers.



Contract blending.



Contract milling.



Cryogenic milling.



Steam sterilisation.



Size sorting and granulation.



Sensory evaluation.



Kosher and Halaal requirements.



Pilot plants for the research and development of new technologies, products, systems and processes for the meat, bakery and convenience food sectors.

State-of-the-art Facilities



Johannesburg



The Johannesburg site in Longmeadow, Modderfontein, incorporates Crown National Head Office, the Northern Region trading branch, a fully stocked, customer-friendly Factory Mart and stateof-the-art technical facilities for the Food Industry.

In our product development and application facilities based here, we offer our customers integral technical service so that they can further improve their products and manufacturing processes.

We are committed to offering solutions, ideas and advice to the Food Industry, while creating specialist

products and building close working partnerships with customers.

Our skills cover all the aspects and markets within the Food Industry and with the experience and knowledge of our application technologists, we will develop the solutions you need.

Our facilities regard food safety as critical; especially issues around compliance and quality management remain a key area and will become more prominent as retailers put more pressure on manufacturers.





State-of-the-art Facilities



Cape Town



Within Bidfood, we collaborate and participate in food industry trends and transformations. In 2012 we established a world-class, state-of-the-art facility in Cape Town, with eye catching appeal, differentiated architecture as well as prominence and stature. In our quest to be the best and develop new markets, this facility, combined with the technical capability of our staff, will support our innovation focus.

Our own labs with product development and pilot plant production facilities for meat, dairy, beverage, sauces and condiments as well as convenience foods, provide us with specific development competence. Customised solutions, which are both viable and compliant with food safety standards, are the premise we follow in the innovation and development of our products.

The future and the development of our products is aimed at meeting new trends arising from the incorporation of new technological advances in processes, as well as the design and new features of all products in the Food Industry.





Centres of Innovation, Design & Technology





Bidvest Food Centres of Excellence

Our customers in all food industry segments enjoy exceptional peace of mind knowing that they are receiving only the finest products available, manufactured in accordance with international food safety specifications and backed by unrivalled technical expertise.

There are currently two Centres of Excellence, one in Johannesburg and the other in Cape Town. These centres already offer our customers the very best in product design, research and development.

We believe that there is always more we can do for our customers. After all, the customer has become more sophisticated, segmented and demanding, and expects more in terms of customisation, 'newness', quality and price.

It is our vision to transform these centres into modern and superior facilities, making us the leading ingredients' company in Africa. We have recently completed the construction of the new Innovation, Design & Technology Centre in Cape Town.





Centres of Innovation, Design & Technology



In the last eight years we have built and resourced the BidFood Technologies manufacturing operation in Cape Town and more recently we have upgraded the Bakery Ingredients manufacturing operation in Johannesburg.

The biggest and most significant change for Crown has been the decision to build the So Good Foods Marinades and Sauces Plant, for the manufacture of our well known Meister Club® and Grama's® ranges. This has further enhanced our vision of self-sufficiency and offering of differentiated services to the industry.

Coupled with these new facilities, we have employed young, highly technical and skilled staff who have lead the way in establishing associations with international principals, which provides us with an invaluable supply base for the innovative specialised ingredients we market.

These changes have placed us in a position to compete with globally renowned players and attracted new principals.

The new Centre of Innovation, Design & Technology in Cape Town provides an "out of this world", interactive, sensorial experience, stimulating the senses through visual, audio, tactile, taste and

smell and leaving an everlasting impression of the Innovation and Technology we will provide.

The Theatre of Food Ingredients showcases our products, technical competence, principles, innovation data base, sensory evaluation, pilot plant processing capabilities and development expertise not to mention analytical testing of rheology, viscometry and protein composition that will support the product development process.

The facility houses separate, inter-leading, specialist pilot plant amenities for the:

- Meat Sector
- Convenience Sector
- Sauces and Condiments Sector
- Dairy and Beverage Sector

Each of these is equipped with the latest pilot plant scale equipment that accurately emulates the scale of process in large operations. We are able to conduct factory trials in simulated conditions at a fraction of the cost usually experienced when testing in full scale operations.

 The Theatre of Food Ingredients houses a 100-seater auditorium and presentation space which will be integrated into the pilot plant experience.



Centres of Innovation, Design & Technology







- A sensory evaluation centre is included for the purpose of evaluating products under specific lighting and atmospheric conditions.
- Furthermore, the facility also includes an interactive kitchen for demonstrations and training on the preparation of home meal replacement solutions (HMR).

The Theatre of Food Ingredients provides infotainment with demonstrations by chefs and food specialists and is used as a home base by various institutions and associations. Our International principals have welcomed this initiative as it not only serves as a base for their local activities but also emulates the work they conduct in their own facilities on a comparative basis. The principles are linked via video conferencing facilities to our Centre of Innovation, Design & Technology and in turn with all our trading branches in order to offer on-going audio visual support in the form of lectures, demonstrations, training, interactive workshops, meetings and general communication.



Microsafe®



There is an increasing world-wide demand for improved food safety standards and we regard compliance as the key to the future of Crown National.

The BidFood Technologies operations in Cape Town and Johannesburg are ISO 22000 system certified.

Our ISO 22000 commitment forms part of our "Microsafe®" food safety programme objectives.

Our "Microsafe®" food safety programme demands that we employ numerous other food safety initiatives such as:-

- Procurement of pre selected and approved materials from approved suppliers, conforming to specifications and service criteria as determined by Crown National.
- Automated and manual spice cleaning operations to remove possible foreign matter such as glass, foreign seeds etc.
- Quality Control of incoming shipments to ensure the products conform to specifications, pre-shipment samples and suppliers certificates of analysis.
- Lot traceability for future reference purposes.
- High Pressure Liquid Chromatography for the detection of Aflatoxins, Sudan Red and Scoville Heat Unit determination.
- Microbiological analysis of pre- and post-sterilisation samples to ensure conformance with legal requirements.
- Microsafe® steam sterilisation of herbs and spices to ensure conformance with government regulations for microbiological loads.
- Metal detection and X-Ray scanning to detect possible ferrous, non-ferrous and other physical contaminants.
- Quality Assurance of finished products, with the provision of certificates of analysis to customers.
- Near infrared radiation analysis.
- We welcome regular quality audits by our customers.

As an extension of our commitment to food safety at manufacturing level, Crown National has embarked on implementing a Food Safety Management System at distribution level. The Food Safety system is specifically designed to meet the requirements of the Genesis Good Storage and Distribution Practices. Each distribution centre (trading branch) is independently audited against criteria based on national legislation as well as relevant national and international standards.





Microsafe®











Food Ingredients

We offer the most comprehensive, diverse and innovative range of products to satisfy all the needs of the meat and food industries.







Food Ingredients



Index

INTRODUCTION	FOOD ADDITIVES & FOOD
How to Cost a Meat Block19	ENHANCERS
Meat Cut Identification20	Introduction
The Batch Pack System	Flavour Enhancers
	Food Additives81
FRESH MEAT PRODUCTS	
Introduction	TROUBLESHOOTING
Beef Sausages	In Emulsion Products
Boerewors	In Fresh Products
Boerewors Concentrates	
Braaiwors	
Burgers, Frikkadels and Meatballs44	MARINADES & SAUCES
Flavoured Sausages	Introduction
Mutton Sausages	Flavabaste Range105
Poultry Sausage	Grama's® Sauces and Condiments106
Pork Sausages	Meister Club® Cook 'n Grill®
Wors32	Meister Club® Marinades
	Rugby Marinades
	Something Chunky® Range108
COOKED/CURED MEAT PRODUCTS	Vinegars
Introduction	
Brawn	CDDINIALES O SEASONUMOS
Frankfurters58	SPRINKLES & SEASONINGS
French Polony	Introduction
Injected, Pickled and Cured Products	Herbs and Spices
Meat Loaves	Sprinkles and Seasonings111
Preparation of 1:5:5 Fat Emulsion	
Reformed Ham	CLAZES CHIMPS COATINGS & DUDS
Russians, Cooked Salamis and Smokies 68	GLAZES, CRUMBS, COATINGS & RUBS
Spreads	Coatings
Vienna Sausages56	Glazes
	Rubs
MEAT SNACKS	Nubs130
Introduction	
Biltong and Chilli Bites	HOME MEAL REPLACEMENTS
Cabanossi	Introduction
Dry Wors	So Good® Desserts
	So Good® Meal Mixes
	So Good® Sauces
	Other Home Meal Replacements
	ı

The Batch Pack System



Advantages

Batch Packs Offer You The Following Advantages:

Convenient Time Saving Consistency of Flavour

- eliminates the need for weighing separate ingredient quantities.
- each batch of product you prepare will contain the same, accurately weighed ingredients, giving you better quality control. Preservatives and cures, where applicable, are packed separately within the Batch Pack.

Reduced Stock Holding

- a variety of ingredients need not be held in stock. All the ingredients you require are blended in their correct proportions in each Batch Pack.

Eliminated Wastage

- no spillage or spoilage of separate ingredients as Batch Pack contents are

Freshness

pre-weighed and the total contents of each pack is used.

- Batch Packs are only opened prior to use. Non-Batch Pack ingredients, once opened, can lose their freshness if only partly utilised.

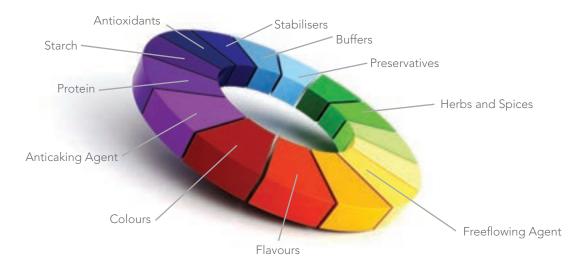
Quality Control

- the quality of raw materials used in each blend is carefully monitored and controlled by Crown National through its Microsafe® process.

Batch Control

each Batch Pack contains a production batch number which allows Crown
 National to track the raw materials used in the unlikely event of a quality problem.

A TYPICAL BATCH PACK CONTENTS COULD INCLUDE:



Applications:

Meat Products

- fresh sausages such as boerewors, beef, pork, mutton, chicken sausage and braaiwors.
- cured and dried sausage such as pepperoni, salami, cabanossi and droëwors.
- cured meat cuts such as ham, biltong and bacon.
- smoked and cooked sausage such as russians, viennas, kassegriller, frankfurters.
- emulsion products such as loaves, french polony, viennas, pates, mortadella and frankfurters.

Poultry Products
Sauces and Condiments

- injection brine for pumping of whole birds and portions.

Sauces and Condiments - dry and wet cook in sauces, marinades, sauces and bastings.

Baked Goods - pizza dough, breads, cakes and buns etc.

And any other applications where combinations of functional ingredients are used in a batch system.

Meat Blocks



How To Cost A Meat Block

Pork (70:30) 10.0 kg @ R 28.00 /kg = R 280.0 /kg Vinegar 5% 1.0 litres @ R 2.60 /Litre = R 2.6 /kg Vater 1.0 kg @ R - = R - = R Boerewors Batch Pack 1.1 kg @ R 59.00/kg = R 64.9 TOTAL 33.1 kg = R 1 047.5	0).20\ 20					ORS PRODU			
Vinegar 5% 1.0 litres @ R 2.60 /Litre = R 2.60 Water 1.0 kg @ R - = R Boerewors Batch Pack 1.1 kg @ R 59.00/kg = R 64.9 TOTAL 33.1 kg = R 1047.5	(,					35.00 /kg			700.00
Water 1.0 kg @ R - = R Boerewors Batch Pack 1.1 kg @ R 59.00/kg = R 64.9 TOTAL 33.1 kg = R 1 047.5	Pork (70	0:30) 10	0.0	kg	@	R	28.00 /kg	=	R	280.00
Boerewors Batch Pack 1.1 kg @ R 59.00/kg = R 64.9 TOTAL 33.1 kg = R 1047.5	Vinegar	5%	1.0	litres	@	R	2.60 /Litre	=	R	2.60
TOTAL 33.1 kg = R 1 047.5	Water		1.0	kg	@	R	-	=	R	-
	Boerewors Batch Pack		1.1	kg	@	R	59.00/kg	=	R	64.90
COST OF MEAT RI OCK/kg (i) R 1 047 50 ÷ 33 1 kg = R 31 65/kg	TOTAL	33	3.1	kg				=	R	1 047.50
2051 OF WEAT BEOCKING (1) IN 1 047.50 . 33.1 kg - 1 31.05/kg	COST OF MEAT BLOCK/kg (i) R 1 04	ا 7.5	0	÷		33.1 kg	=	R	31.65/kg*
(*This excludes the cost of the casing).		\								

THE COST OF THE CASING CAN BE CALCULATED AS FOLLOWS:

Fill one bundle of the casing, weigh the end product and divide the number of kilograms into the cost per bundle to give a cost per kilogram.

EXAMPLE:

TOTAL PRODUCT COST	=	R	32 90/kg
Cost of casing (ii)	=	R	1.25/kg
Cost of meat block (i)	=	R	31.65/kg
COST OF CASING (ii)	=	R	1.25 /kg
Casing costs Filled bundle weighs		R	59.95 /bundle 48.00 kg

= R 32.90/kg (excluding the cost of packaging and labour).

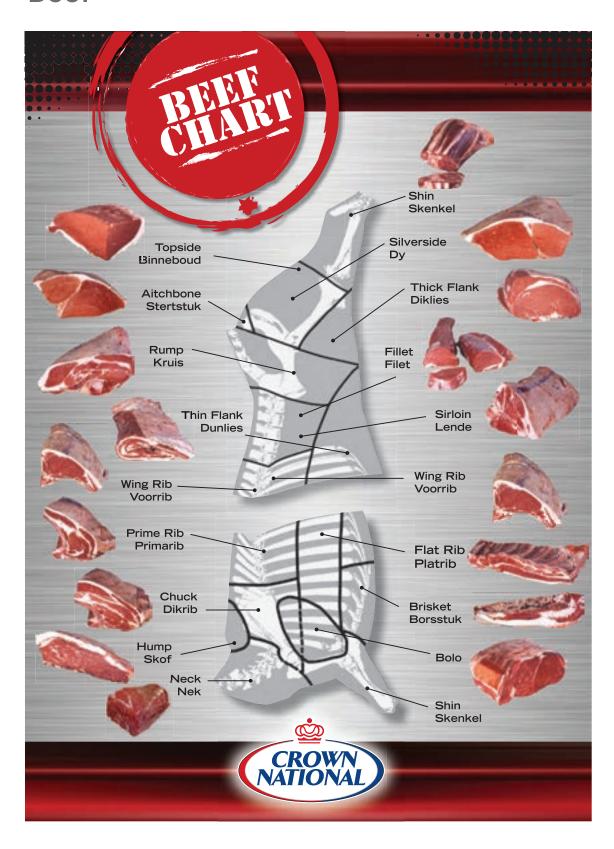
NOTE: Prices of meat, spices and casings fluctuate. The prices used above are merely for the purpose of example.

Beef	@	R	=	R	
Pork	@	R	=	R	
Vinegar Vinegar	@	R	=	R	
Water	@	R	=	R	
Batch Pack	@	R	=	R	
Cost of Casing	@	R	=	R	
<pre>kg = R Cost per kg is therefore R finished product</pre>					

Meat Cut Identification



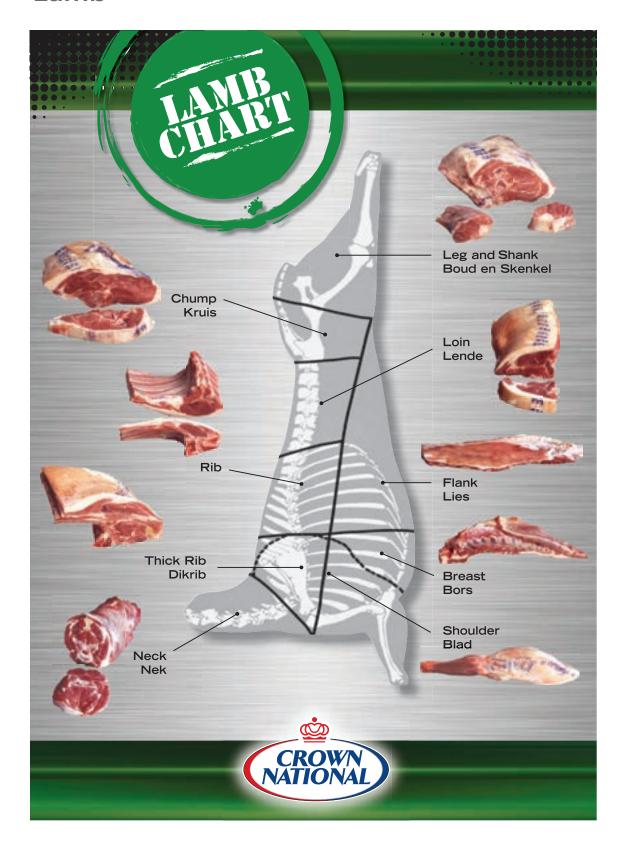
Beef



Meat Cut Identification



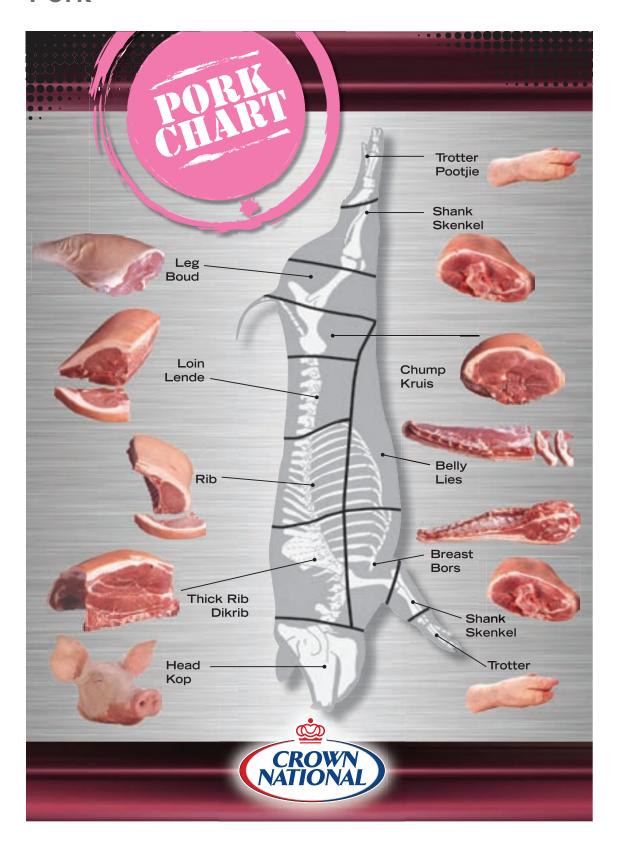
Lamb



Meat Cut Identification



Pork



Food Ingredients

Fresh Meat Products

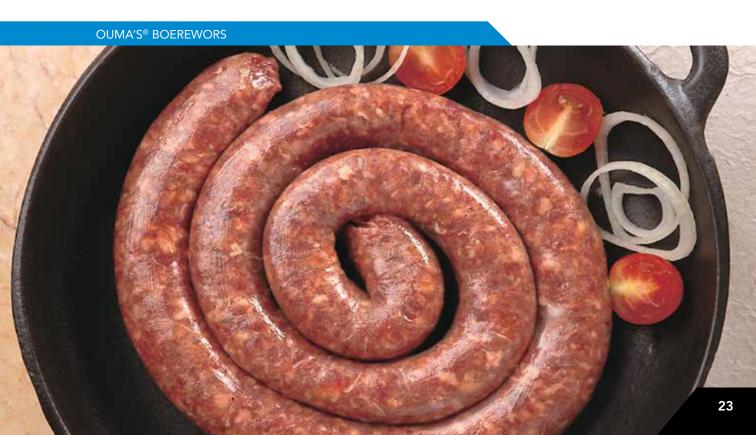


Introduction

With the ever increasing price of fresh* meat, we at Crown National offer products that enable you to achieve the best possible yields from your fresh meat. Our Batch Packs system combines food science, sensory technology, and analytical chemistry to ensure that the Boerewors, Bangers or Burgers that you produce will achieve the maximum profit margin at the retail counter.

Our Food Additives for fresh meat products, similarly, are designed to provide the best possible functionality at the most economical usage levels. The Microsafe® food safety programme ensures that every Crown National product you use in your business is backed by sound food safety and quality principals.

* The term fresh is to indicate uncooked product.





Boerewors

What is Boerewors

Any sausage sold under a name in which the word "boerewors" appears either by itself or in combination with any other word or expression.

Compositional Requirements:

- (1) Raw boerewors shall be manufactured from the meat of an animal of the bovine, ovine, porcine or caprine species or from a mixture of two or more thereof, shall be contained in an edible casing, and -
 - (a) shall contain a minimum of 90 percent total meat content and not more than 30 percent fat content;
 - (b) shall contain no offal except where such offal is to be used solely as the casing of the raw boerewors;
 - (c) shall contain no mechanically recovered meat;
 - (d) may contain a maximum of 0,02 grams of calcium per 100 gram of the product mass.
- (2) In or in connection with the manufacture of raw boerewors, no ingredients shall be added except -
 - (a) cereal products or starch;
 - (b) vinegar, spices, herbs, salt or other harmless flavourants;
 - (c) permitted food additives;
 - (d) water.



View our video on 'HOW TO MAKE BOEREWORS' by scanning this QR code on your smart phone or by going to: http://www.youtube.com/watch?v=mbAOBxorra8

How To Make Boerewors

EQUIPMENT PREPARATION:

- 1. Ensure that equipment is clean.
- 2. Ensure mincer knives and plates are sharp. Run fat through mincer prior to mincing.
- 3. Place a nozzle correlating with the diameter of the casing onto the filler.

PREPARATION:

- 1. Rinse and soak Gold Crown® Casings.
- 2. Pre-cool all meat to 0° C.
- 3. Chill water to 2° C.

METHOD:

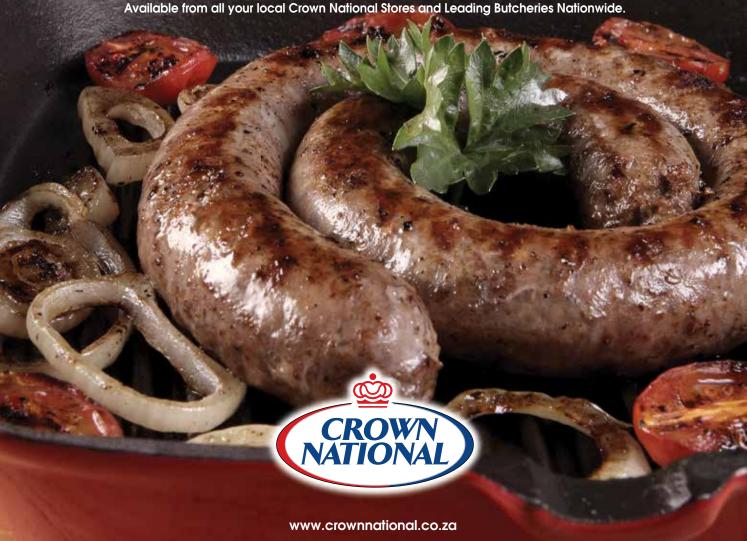
- 1. Weigh off suggested meat and mince through 13 mm plate.
- 2. Add the Crown Batch Pack to the chilled water, mix thoroughly and allow to stand for 15 20 minutes.
- 3. Combine minced meat with Crown Batch Pack/water mixture.
- 4. Mix well and mince through 4.5 mm for boerewors, braaiwors and wors or 3 mm plate for sausage products.
- 5. Put the meat mixture into the filler and charge the nozzle with washed Gold Crown® Casing. Fill slowly.
- 6. Allow completed boerewors to mature for 12 hours by hanging in a refrigerated room.

NOTE: The above production method is also applicable in the manufacture of wors, braaiwors and all kinds of sausage products.



Flavour perfected with roasted coriander!

Crown National's Ouma's Boerewors is the finest example of a recipe perfected over time. Presenting medium flavour with roasted coriander, Ouma's is the choice of butchers and their customers countrywide.





Boerewors

TOP SELLER

Ouma's® Boerewors

Medium flavour with roasted coriander.



MEAT BLOCK

Beef (70:30) 20.0 kg Pork (70:30)10.0 kg Ice Water 2.0 kg

Ouma's® Boerewors Batch Pack 1.1 kg

TOTAL 33.1 kg

CODE: 4420152 1.1 kg

TOP SELLER

Traditional Boerewors

Mild to medium flavour with a good colour. Profile consists of a strong meaty note enhanced by coriander, cloves and nutmeg with a hint of paprika for colour.



MEAT BLOCK

Meat (70:30)20.0 kg Ice Water 1.0 kg

Traditional Boerewors

Batch Pack

TOTAL

22.0 kg

1.0 kg

1 kg CODE: 4402565

Burgherswors®

Medium to spicy flavour typical of the traditional boerewors recipes.



MEAT BLOCK

(70:30)Reef 24.0 kg Pork (50:50)12.0 kg Rusk 1.0 kg 1.0 kg Crown Vinegar Gramas® Worcester Sauce $0.5 \, \mathrm{kg}$ Ice Water 2.0 kg Burgherswors® Batch Pack 1.0 kg

1 kg CODE: 4420851

TOTAL 41.5 kg

Centenary Boerewors

Celebrating 100 years of flavour, Crown National introduces Centenary Boerewors. Timeless great flavour!



CODE: 4400301



MEAT BLOCK

Beef (80:20)30.00 kg Ice Water 2.00 kg

Centenary Boerewors

Batch Pack 1.10 kg

TOTAL 33.1 kg

Classic® Boerewors

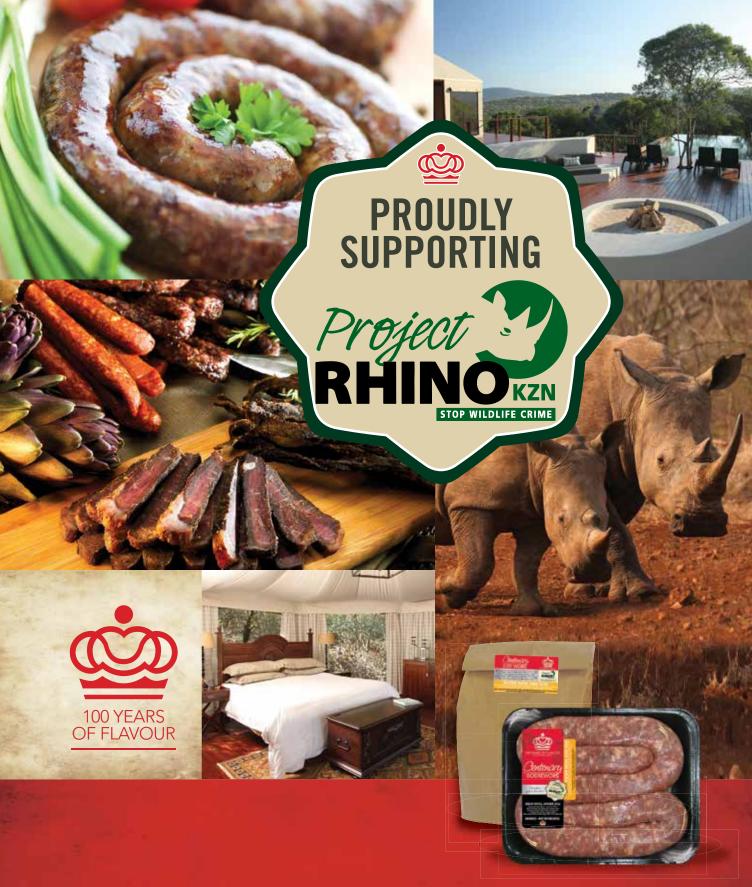
Medium flavour with a good colour. Flavour profile includes notes of coriander, black pepper, cloves and nutmeg.



CODE: 4402185 1 kg

MEAT BLOCK

Meat (70:30)20.00 kg Ice Water 1.00 kg 0.25 kg Crown Vinegar Classic® Boerewors Batch Pack 1.00 kg TOTAL 22.25 kg



For every product sold in the Centenary Range, to participating stores nationwide

Crown National is contributing to Project Rhino KZN's work to

SAVE SOUTH AFRICA'S ENDANGERED RHINOS

For further information go to: www.crownnational.co.za





Boerewors

Country Boerewors

Spicy flavour with a predominant coriander note. Excellent colour.

1 kg CODE: 4420852



MEAT BLOCK

 Beef
 (70:30)
 15.0 kg

 Pork
 (50:50)
 10.0 kg

 Ice Water
 2.0 kg

 Country Boerewors Batch Pack
 1.0 kg

 TOTAL
 28.0 kg

Plaaswors

Spicy flavour with top notes of clove and nutmeg.

1.1 kg (CT) CODE: 4408778 1.1 kg CODE: 4420063



MEAT BLOCK

Meat (70:30) 30.0 kg
Ice Water 1.0 kg
Crown Vinegar 1.0 kg
Crown Plaaswors Batch Pack 1.1 kg
TOTAL 33.1 kg

Farmstyle Boerewors

A typical farmstyle boerewors strong in coriander and a blend of spice extracts to round-off the flavour.

1 kg CODE: 4420854



TOTAL

MEAT BLOCK

Meat (70:30) 20.0 kg Ice Water 1.0 kg Farmstyle Boerewors Batch Pack 1.0 kg

Gold Crown® Boerewors

A well balanced flavour with a hint of clove and excellent colour.



MEAT BLOCK

22.0 kg

 Beef
 (80:20)
 10.0 kg

 Pork
 (70:30)
 4.0 kg

 Ice Water
 1.0 kg

 Gold Crown® Boerewors
 Batch Pack
 0.6 kg

 TOTAL
 15.6 kg

Goudveld® Boerewors

600 g

CODE: 4403250

Flavoured in the traditional "Transvaal" way, with strong coriander notes supported by a hint of cloves, nutmeg and black pepper.

1.1 kg CODE: 4420000



MEAT BLOCK

Meat 30.0 kg
Ice Water 2.0 kg
Goudveld® Boerewors
Batch Pack 1.1 kg
TOTAL 33.1 kg



Boerewors

Kalahari Boerewors®

A typical African flavour.



	MEAT BLOCK	
Beef	(80:20)	15.0 kg
Pork	(70:30)	7.0 kg
Crown Vine	gar	0.7 kg
Ice Water		0.7 kg
Kalahari Boe	erewors® Batch Pack	0.9 kg
TOTAL		24.3 kg

0.9 kg CODE: 4402188

Pioneer® Boerewors

Rich, tangy flavour and good colour.



Beef	(80:20)	16.0 kg
Pork Trims	(50:50)	12.0 kg
Ice Water		2.0 kg
Pioneer® Boer	ewors Batch Pack	1.0 kg
TOTAL		31.0 kg

MEAT BLOCK

1 kg CODE: 4420233

Rugby Boerewors

Balanced notes of cloves, pepper and coriander to complement the game.





MEAT BLOCK

Meat30.0 kgIce Water2.0 kgRugby Boerewors Batch Pack1.1 kg

TOTAL 33.1 kg

RUGBY BOEREWORS





Boerewors

Voortrekker Boerewors

Soos oom Joos dit gemaak het. Roasted coriander with strong cloves and spicy nutmeg notes. A tried and tested recipe known to Crown for more than 50 years.

1 kg CODE: 4420546



0 kg				
0 kg				
0 kg				
Voortrekker Boerewors				
0 kg				

TOTAL 31.0 kg

Wapad Boerewors

A delicious blend of coriander and cloves that makes a perfect boerewors for the braai.

1 kg CODE: 4430237 3 kg CODE: 4402184



MEAT BLOCK Beef (80:20) 16.0 kg Pork (70:30) 12.0 kg Ice Water 2.0 kg Wapad Boerewors Batch Pack 1.0 kg

TOTAL 31.0 kg

WAPAD BOEREWORS





Boerewors Concentrates

Crown "S" Boerewors - Coarse

A well rounded and balanced boerewors with no strong predominant flavour.

10 kg CODE: 4420180

DOSAGE RATE

- 7,5 g Crown "S" per kg end product.
- Add 14 16 g salt per kg end product.

Suggested use of 5% of liquid with the meat, spice and salt to end product This could be made up by water and/or Grama's® Worcester sauce and Crown vinegar.

Nattipak Boerewors

A typical boerewors of medium strength with a definite coriander flavour.

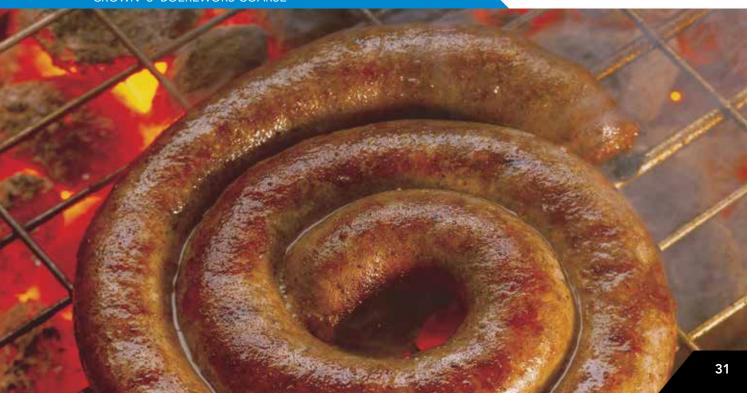
16 x 125 g CODE: 4402028

DOSAGE RATE

• 125 g Nattipak per 50 kg end product. Add 14 - 16 g salt per kg end product.

Suggested use of 5% of liquid with the meat, spice and salt to end product This could be made up by water and/or Grama's® Worcester sauce and Crown vinegar.

CROWN 'S' BOEREWORS COARSE





Wors

TOP SELLER

Legends Wors

Become a Legend in your own right with this top selling wors blend.



MEAT BLOCK

TOTAL	15.0 kg
Legends Wors Batch Pack	1.4 kg
Crown Vinegar	0.1 kg
Ice Water	3.7 kg
Fat	3.0 kg
Beef	6.8 kg

1.4 kg CODE: 4420905

Chakalaka Wors

It's very, very popular; this unique South African flavour is growing! Flavour profile consists of coriander, ginger, nutmeg, garlic, onion flakes, a dash of tang and a pinch of curry to tickle the taste buds.

1 kg CODE: 4441013



MEAT BLOCK

Beef	(70:30)	12.5 kg
Ice Water		3.0 kg
Chakalaka Wors		
Batch Pack		1.0 kg

TOTAL 16.5 kg

Dhania Wors

A delicious wors with a strong coriander flavour.

CODE: 4401988 1 kg



MEAT BLOCK

Meat	15.0 kg
Ice Water	4.0 kg
Dhania Wors Batch Pack	1.0 kg

TOTAL 20.0 kg

Chief's Choice® Induna Wors

A mouthwatering wors made to suit the tastes of the South African market.



MEAT BLOCK

Beef	19.00 kg
Fat	7.75 kg
Ice Water	6.50 kg
Crown Vinegar	0.25 kg
Chief's Choice® Induna Wors	

Batch Pack 1.50 kg

TOTAL 35.0 kg

Opstal Wors

1.5 kg

A unique and traditional boerewors with a great balanced flavour.



MEAT BLOCK

Beef	(70:30)	9.5 kg
Pork	(70:30)	7.0 kg
Spek		2.3 kg
Ice Water		5.2 kg
Opstal Wors	1.0 kg	
TOTAL		25.0 kg

1 kg

CODE: 4420900

CODE: 4470508

NOW SELLING

From The Proud Suppliers Of















CAUSE BRAAIING IS A SPORT!







Braaiwors

Note:

TOP SELLER

The Braaiwors range of products are economical, affordable and provide customers with exceptional value for money.

Eezy Braai® Braaiwors

Traditional characteristic flavour of cloves, nutmeg, pepper and coriander. Excellent colour retention.

3 kg CODE: 4402322 6 kg CODE: 4402324

MEAT BLOCK

3.0 kg 6.0 kg (90:10) 12.0 kg 24.0 kg Meat 8.0 kg 16.0 kg Ice Water 9.0 kg 18.0 kg Crown Vinegar 1 cup 2 cups Eezy Braai[®] Braaiwors Batch Pack 3.0 kg 6.0 kg **TOTAL** 32.0 kg 64.0 kg

Buccaneer Russian Braaiwors

A braaiwors with a typical Russian flavour and a good shelf life.



TOTAL

MEAT	BLOCK

Meat (70:30)12.0 kg Fat 8.0 kg Ice Water 9.0 kg Buccaneer Russian Braaiwors Batch Pack 3.0 kg

3 kg CODE: 4400503

Chief's Choice® Chargriller

Every grill lover's dream! This chargriller is tasty and very affordable.



MEAT BLOCK

32.00 kg

3.0 kg

3.7 kg Beef MDM 4.0 kg Fat 8.7 kg Ice Water 10.6 kg Chief's Choice® Chargriller

Batch Pack

TOTAL 30.0 kg

Chief's Choice® Chilli Chargriller

CODE: 4470507

The spicy alternative to the chargriller. Great taste with a bit of a bite!

3 kg



MEAT BLOCK

Beef 3.7 kg MDM 4.0 kg Fat 8.7 kg Ice Water 10.6 kg Chief's Choice® Chilli Chargriller 3.0 kg

Batch Pack

CODE: 4470506 **TOTAL** 3 kg 30.0 kg GREAT TASTING FLAVOUR FROM CROWN NATIONAL!

Chief's
CHOICE
MEATY & TASTY
M

SIX MEATY & TASTY CHOICE VARIANTS!

AFFORDABLE MEAT PORTION

FEATURES	BENEFITS	
New Flavour Creation Development	Cost	
	Instant Flavour Delivery	1001138
	Taste Panel Acceptance	DESCRIBIS
New Functional Technology	Ahead of the Game	3
	Versatile Extended Meatblocks	MEAT (55% Ingredients: Meat (Beef Meat), Water, Vegeta
	Improved Texture	Extracts, Phosphate, MS Sodium Metabisulphite Sucrose, Anticaking
	Minimal Drip Loss	(Bellpepper Re (Smoke Flav May contain
Batch Pack/Meatblock Cost	Price Competitive	UNCOOKED - I
	Affordable	www.crc
	Attract More Consumers	
New Category	Differentiate From Competitors	;
GET YOUR	Registered Name - Chargriller	
New Brand CHIEF'S CHOICE	Registered Brand - Chief's Choic	:e
PRODUCT	Recognised in the Market	
TODAY!	Affordable Quality	
IODAI:	Differentiation in the Counter	
	Ease of Line Extension Launches	s

Chief's CHOICE

MEAT (55%), WATER (35%)

WEAT (55%), WATER (35%)

WEAT









Braaiwors

Econo Special Braaiwors

Aromatic, full-bodied braaiwors with a BBQ flavour.

6 kg CODE: 4422090

MEAT BLOCK

Meat (90:10) 16.0 kg
Fat 18.0 kg
Ice Water 22.0 kg
Econo Special Braaiwors
Batch Pack 6.0 kg

TOTAL 62.0 kg

Chief's Choice® Tomato Chargriller

A chargriller that's great for the braai and has a strong tomato tang to the flavour.

3 kg CODE: 4470509



MEAT BLOCK Meat 8.0 kg Fat 8.4 kg Ice Water 10.6 kg Chief's Choice® Tomato Chargriller Batch Pack 3.0 kg TOTAL 30.0 kg

Sosatie Wors

Fruity peach flavour enhanced with sweet spices such as aniseed and coriander, fried onion to complement the tang. A must with a braai as a taster with the traditional beef sausage or boerewors.

500 g CODE: 4400509



	MEAT BLOCK	
Beef	(70:30)	9.00 kg
Ice Water		1.00 kg
Peach Chutr	ney	0.25 kg
Sosatie Wor	s Batch Pack	0.50 kg

TOTAL 10.75 kg

CHIEF'S CHOICE® TOMATO CHARGRILLER







What is a Sausage

'Species sausage' means sausage manufactured predominantly from the meat of a specific species of animal or bird and that is sold under a name in which the name of that species and the word "sausage" appear, either by themselves or in combination with any other word or expression.

Species sausage must contain a minimum of 75 percent total meat content, of which -

- (i) a minimum of 75 percent shall be meat of the predominant species,
- (ii) a maximum of 25 percent may be meat of any one or more other species of animal or bird.

'Mixed-species sausage' means sausage manufactured from any mixture of the meat of two or more species of animal or bird and that is sold under a name in which the names of the different species and the word "sausage" appear, either by themselves or in combination with any other word or expression. Species sausage must contain a minimum of 75 percent total meat content.

Further compositional requirements:

- (1) Raw species sausage and raw mixed species sausage-
 - (a) shall not contain more than 30 percent fat content;
 - (b) shall contain no offal except where the offal is to be used solely as the casing of the sausage;
 - (c) shall contain no mechanically recovered meat;
 - (d) may contain a maximum of 0,02 grams of calcium per 100 grams of the product mass.
- (2) In or in connection with the manufacture of raw species sausage or raw mixed species sausage no ingredients shall be added except -
 - (a) cereal products or starch;
 - (b) vinegar, spices, herbs, salt or other harmless flavourants;

CODE: 4402369

- (c) permitted food additives;
- (d) water.

Beef Sausages

BBQ Beef Sausage

Good colour, selected herbs and spices with a well rounded BBQ flavour.



MEAT BLOCK

Beef & Fat (Meat & Fat) 40.00 kg Ice Water 10.00 kg BBQ Beef Sausage Batch Pack 3.25 kg

TOTAL 53.25 kg

TOP SELLER

3.25 kg



Beef Sausages

BBQ Beef Sausage R

A beefy profile spiced with coriander, pimento, garlic, ginger and a hint of paprika for colour and a beefy enhancer.

CODE: 4402371 3.25 kg

MEAT BLOCK

Beef & Fat 40.00 kg Ice Water 10.00 kg

BBQ Beef Sausage R

Batch Pack 3.25 kg

TOTAL 53.25 kg

Beef Sausage Halaal BBQ

Strong BBQ flavour with a good colour.

3 kg CODE: 4427083

MEAT BLOCK

Beef (70:30)27.0 kg 10.0 kg Fat Ice Water 10.0 kg

Beef Sausage Halaal BBQ

Batch Pack 3.0 kg

TOTAL 50.0 kg

Beef Sausage "R"

A well balanced, success proven flavour, with a distinctive characteristic taste with a pepper touch and good colour.

1 kg CODE: 4402550

MEAT BLOCK

Beef (80:20)11.5 kg Ice Water 2.5 kg Beef Sausage "R" Batch Pack 1.0 kg

TOTAL 15.0 kg

Meister Club® Beef Sausage

A superior quality beef sausage spice offering a good end product colour and flavour.

1 kg

MEAT BLOCK

Beef (70:30)13.5 kg Ice Water 3.5 kg Meister Club® Beef Sausage

Batch Pack 1.0 kg

CODE: 4427078 TOTAL 18.0 kg

Meister Club® Sweet Chilli Beef Sausage

Balanced profile of sweet chilli and mild spices including coriander, paprika, and ginger, enhanced with mustard seed, pepper and strong meaty flavour. Developed to be suited for adults and children alike.

1 kg CODE: 4412244



MEAT BLOCK

Beef (70:30)11.5 kg Ice Water 2.5 kg

Meister Club® Sweet Chilli

Beef Batch Pack 1.0 kg

TOTAL 15.0 kg



Poultry Sausage

Meister Club® Sweet Chilli Chicken Sausage

A sweet combination of coriander, sweet chilli, ginger, black pepper, bell peppers, mustard and strong chicken stock top notes. Appealing to those who like tang without the burn, including Oupa, Ouma and the kids!

1 kg CODE: 4412244



MEAT BLOCK	
Chicken	11.5 kg
Ice Water	2.5 kg
Meister Club® Sweet Chilli	
Chicken Sausage Batch Pack	1.0 kg
TOTAL	15.0 kg

MEISTER CLUB® SWEET CHILLI CHICKEN SAUSAGE



Sweet Chilli flavoured sausage!

Hot on the heels of "Chakalaka", comes the sweet chilli flavour, appealing to those who like the tang but not the heat. This could include Oupa, Ouma and the kids!
"Sweet chilli" is a popular new flavour used on potato chips, corn curls, in sauces, marinades and now from Crown National... in fresh sausages.

The flavour is delivered in an all purpose batch pack, which can be used to make a beef, chicken, mutton or pork sausage. A range of beautiful full colour labels is available.



CODE: 3620026



Flavoured Sausages

TOP SELLER

1.5 kg

BBQ Cocktail Sausage

Typical BBQ flavour with selected herbs and spices.

BROCOCKTAIL

SAUSAGE

Typical RIO, (Raymor More and Angular Angula

MEAT BLOCK

Meat (70:30) 15.0 kg Ice Water 3.5 kg BBQ Cocktail Batch Pack 1.5 kg

TOTAL 20.0 kg

TOP SELLER

Tomato Cocktail Sausage

Caraway, coriander, garlic, onion, cinnamon, lemon and other choice spices, blended with a fresh, ripe tomato flavour.

1.5 kg CODE: 3620964



MEAT BLOCK

Meat(70:30)15.0 kgIce Water3.5 kgTomato Cocktail Batch Pack1.5 kg

TOTAL 20.0 kg

Curry Cocktail Sausage

Exotic in its taste orientation, strong in its colour impression. With curry, garlic, onion and tumeric.

1.5 kg CODE: 3620042



MEAT BLOCK

Meat (70:30) 15.0 kg Ice Water 3.5 kg Curry Cocktail Batch Pack 1.5 kg

TOTAL 20.0 kg

Oriental Sausage

1 kg

Selected eastern herbs and spices giving a spicy sausage with good colour.

CODE: 4427258



MEAT BLOCK

Meat10.5 kgIce Water3.5 kgOriental Sausage Batch Pack1.0 kg

TOTAL 15.0 kg



Mutton Sausages

TOP SELLER

Meister Club® Sweet Chilli Mutton Sausage

Yes, it's versatile enough for all meat types including mutton. A sweet combination of coriander, sweet chilli, ginger, black pepper, bell peppers, mustard and strong chicken stock top notes. It appeals to those who like tang without the burn.

1 kg CODE: 4412244

Sweet Chillies

mutton
sausage

Marria Chillies

Marria C

MEAT BLOCK	
Mutton	11.5 kg
Ice Water	2.5 kg
Meister Club® Sweet Chilli	
Batch Pack	1.0 kg

TOTAL 15.0 kg

Karoo Mutton Sausage

Typical mutton sausage flavour with a touch of herbs.

1 kg CODE: 4427153

MEAT BLOCK

Mutton (70:30) 20.0 kg Ice Water 4.0 kg Karoo Mutton Sausage Batch Pack 1.0 kg TOTAL 25.0 kg





1.0 kg

Pork Sausages

TOP SELLER

Meister Club® Pork Sausage

A good quality pork sausage with a well balanced herb flavour.

CODE: 4427101 1 kg



MEAT BLOCK

Pork (70:30)13.0 kg Ice Water 3.0 kg Meister Club® Pork Sausage

Batch Pack

TOTAL 17.0 kg

Meister Club® Sweet Chilli Pork Sausage

Yes, it's versatile enough for all meat types including pork. A sweet combination of coriander, sweet chilli, ginger, black pepper, bell peppers, mustard and strong chicken stock top notes. It appeals to those who like tang without the burn!

CODE: 4412244 1 kg



MEAT BLOCK

Pork 11.5 kg Ice Water 2.5 kg Meister Club® Sweet Chilli Pork Sausage Batch Pack 1.0 kg

TOTAL 15.0 kg

Pork & Lemon Sausage

A traditional English sausage spiced with black pepper, basil, coriander, nutmeg and ginger with a hint of lemon zest.

1 kg CODE: 4408681



MEAT BLOCK

Lean Pork 5.5 kg 2.0 kg Spek 1.5 kg Ice Water Pork and Lemon Sausage Batch Pack 1.0 kg

TOTAL 10.0 kg

MEISTER CLUB® PORK SAUSAGE





Burgers, Frikkadels and Meatballs

How To Make Burgers

METHOD:

- 1. Weigh off suggested meat and mince through 13 mm plate.
- 2. Add the Crown Batch Pack to the chilled water, mix thoroughly and allow to stand for 15 20 minutes.
- 3. Combine minced meat with Crown Batch Pack/water mixture.
- 4. Mix well and mince through 4.5 mm plate.
- 5. Form into patties.

NOTE: Crown National Burger Spices are proven favourites. The comprehensive range of superb products covers the full flavour spectrum, enabling you to offer your customers the very best in quality burgers.



View our video on 'HOW TO MAKE BURGERS' by scanning this QR code on your smart phone or by going to: http://www.youtube.com/watch?v=Gu8FlTyrQgE&feature=plcp





Burgers, Frikkadels and Meatballs

TOP SELLER

Stetson® Beef Burger

A well balanced flavour of pepper, coriander, nutmeg and onion. Good colour.

1 kg CODE: 4605012



MEAT BLOCK

Beef (70:30) 7.5 kg
Ice Water 1.5 kg
Stetson® Beef Burger
Batch Pack 1.0 kg

TOTAL 10.0 kg

TOP SELLER

1 kg

Stetson Boerie Burger®

Salty, with a coriander and cloves flavour and slight meaty notes.



MEAT BLOCK

Meat 7.5 kg
Ice Water 1.5 kg
Stetson Boerie Burger®
Batch Pack 1.0 kg

TOTAL 10.0 kg

OP SELLER

Stetson® Chargrill Burger

For that authentic American grill flavour. Enhanced with meaty chargrill flavour. Includes onion flakes, celery, black pepper, coriander and nutmeg.

CODE: 4408047

1 kg CODE: 4605020



MEAT BLOCK

Beef (70:30) 7.5 kg Ice Water 1.5 kg Stetson® Chargrill Burger

Batch Pack 1.0 kg

TOTAL 10.0 kg

TOP SELLER

Stetson® Cheese Burger

Authentic burger with added cheese flavour. Includes onion, mustard, black pepper and coriander and enhanced with cheese powder.

1 kg CODE: 4605039



MEAT BLOCK

Beef (70:30) 7.5 kg
Cheddar Cheese 0.3 kg
Ice Water 1.5 kg
Stetson® Cheese Burger
Batch Pack 1.0 kg

TOTAL 10.3 kg

TOP SELLER

Stetson® Pepper Burger

Choice pepper, selected paprika varieties. All combined with a characteristic touch of onion.

1 kg CODE: 4605047



MEAT BLOCK

Beef (70:30) 7.5 kg
Ice Water 1.5 kg
Stetson® Pepper Burger
Batch Pack 1.0 kg

TOTAL 10.0 kg

HOT OFF THE GRILL



BURGERS



ALSO SEEN IN T COMPANY OF

















NOW SELLING



Burgers, Frikkadels and Meatballs

Chief's Choice Burger

New flavour creation that delivers instantly for perfect burgers that are very easy on the pocket.



MEAT BLOCK	
Meat	12.6 kg
Fat	3.0 kg
Ice Water	7.4 kg
TVP	4.5 kg
Chief's Choice Burger	
Batch Pack	2.5 kg
TOTAL	30.0 kg

2.5 kg CODE: 4470505

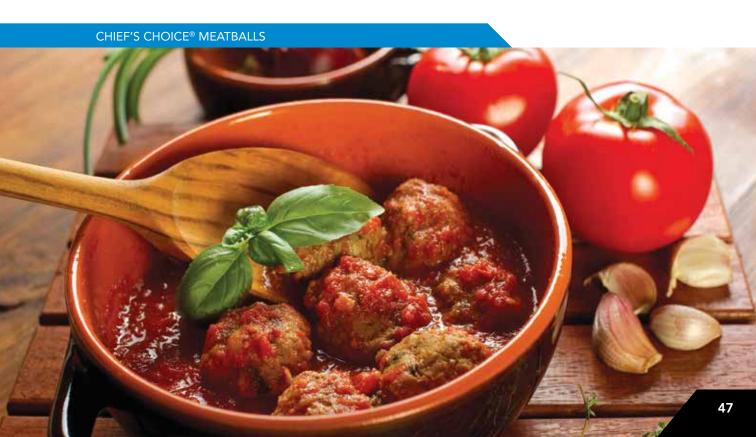
Chief's Choice Meatballs

New flavour creation that delivers instantly for perfect meatballs that are very easy on the pocket.



MEAT BLOCK	
Meat	12.6 kg
Fat	3.0 kg
Ice Water	7.4 kg
TVP	4.5 kg
Chief's Choice Burger	
Batch Pack	2.5 kg
TOTAL	30.0 kg

2.5 kg CODE: 4470505





Burgers, Frikkadels and Meatballs

Dhania Burger

An exciting new burger with a strong coriander flavour.

1 kg CODE: 4401988



MEAT BLOCK

Meat 15.0 kg Ice Water 4.0 kg Dhania Wors Batch Pack 1.0 kg

TOTAL 30.0 kg

Meister Club® Chicken Burger

Flavoured with a balanced combination of black pepper, celery and onion with a hint of turmeric to enhance the colour. Garnished with parsley.

1 kg CODE: 3500025

MEAT BLOCK

Chicken Thighs 8.5 kg
Chicken Fat/Skin 3.0 kg
Ice Water 2.5 kg

Meister Club® Chicken Burger Batch Pack

Satch Pack 1.0 kg

TOTAL 15.0 kg

Texas Burger®

Piquant mixture of herbs and spices with a touch of chilli.

2 kg CODE: 3650189



MEAT BLOCK

Meat(70:30)20.0 kgIce Water5.0 kgTexas Burger® Batch Pack2.0 kg

TOTAL 27.0 kg

MEISTER CLUB® CHICKEN BURGER





Introduction

DEFINITION: Cooked and cured meats are products that had been cured using Nitrite and/or a combination of Nitrite and Nitrate, which results in the unique, distinctive properties of cured meat. They are then cooked to a core temperature of 72° C.

The processed meat industry is under ever increasing pressure, to drive down price, to meet ever rising food safety standards, to produce products with specific dietary requirements and to label products in a clear and understandable manner.

Crown National helps provide solutions to these challenges. By employing a wide range of people and technology in the fields of food science, sensory, analytical chemistry and equipment technology, we are able to assist you with all your needs.

Furthermore, our close association with major international food ingredients' companies, ensures that Crown National stays in the forefront when it comes to your choice of ingredient suppliers.

VARIOUS COOKED AND CURED MEAT PRODUCTS





Spreads

How To Make Bacon Spread

METHOD:

- 1. Pre-cook bacon pieces and spek (add 15% extra for cookout) in a stainless steel tray at 80° C until the spek is soft.
- 2. To the cookout in the tray, add boiling hot water to make up the broth requirement. Place the bacon pieces and spek in the bowlcutter and run for 8 revolutions at high speed prior to adding the Crown Batch Pack.
- 3. After a further 10 revolutions at high speed, slowly add the pre-weighed hot broth and cutter until smooth
- 4. Fill into casings and cook at 80°C to an internal heat core temperature of 72°C.
- 5. Chill immediately in cold water prior to refrigeration.

	''
ER	
ш	Α
٠.	
	ar
SEL	
	ba
ຼ	
റ	

Regal Bacon Spread

A cured product, flavoured with black pepper and meaty top notes, using wood smoked bacon to round off the flavour profile.

1 kg CODE: 4060001

MEAT BLOCK

Bacon Pieces 4.5 kg
Spek 3.0 kg
Broth 3.5 kg
Regal Bacon Spread
Batch Pack 1.0 kg

TOTAL 12.0 kg





Spreads

How To Make Meister Club® Liver Spread

PREPARATION:

- 1. Cook spek for 10 minutes in steam cabinet.
- 2. Boil rinds for 15 minutes or until soft. Retain the water.

METHOD:

- 1. Chop the liver in the cutter until it is fine. Add the salt pack from the Crown Batch Pack and cut until the liver becomes bubbly. Remove and set aside.
- 2. Add the spek and rinds into the cutter and chop fine. Add the Binder part of the Crown Batch Pack and after 10 rounds add the hot water and cut to a fine emulsion.
- 3. Add the liver and cut, adding the rest of the Crown Batch Pack until a stable emulsion is formed.
- 4. Fill into a Crown liver polony casing.
- 5. Cook at 75° C till a core temperature of 72° C is reached.
- 6. Cool in cold water.

	Meister Club® Liver S	Spread	MEAT BLOC	K
TOP SELLER	A superior yet economical li A cured product flavoured v cardamom, pepper, cloves, and roast onion with a hint of	vith coriander, ginger, mace	Liver Spek Rinds (Cooked) Hot Water (Stock) Meister Club® Liver Spread Batch Pack	3.0 kg 5.2 kg 1.7 kg 6.0 kg
	1.4 kg	CODE: 5003107	TOTAL	17.3 kg

MEISTER CLUB® LIVER SPREAD





Brawn

How To Make Meister Club® Brawn

EQUIPMENT PREPARATION:

- 1. Ensure that equipment is clean.
- 2. Ensure mincer knives and plates are sharp.

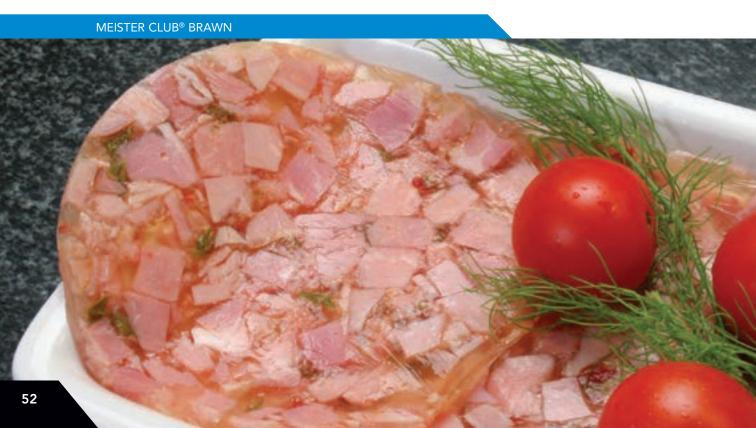
PREPARATION:

- 1. Pre-cure meat with Easy Pump.
- 2. Pre-cook all meat and dice into 10 mm cubes.

METHOD:

- 1. Add the Crown Batch Pack to the boiling water. Mix thoroughly.
- 2. Add cubed, cooked meat into a Crown casing and fill brawn mixture into casing while liquid. Ratio of meat to brawn mixture is 60/40.
- 3. Mix well and clip or tie.
- 4. Roll in ice water for product to set before hanging in cold room.
- 5. Once completely set, slice.

	Meister Club® Brawn		MEAT BLOCK	
TOP SELLER	Superior spicy brawn. Add cutaste for the manufacture of	urry powder to curried brawn.	Lean Beef - Cured Boiling Water Meister Club® Brawn	15.0 kg 6.5 kg 1.0 kg
	1 kg	CODE: 5003240	TOTAL	22.5 kg





Preparation of 1:5:5 Fat Emulsion using Emulsipro® 90e

Emulsipro® 90e is an isolated soy protein that provides texture and emulsion stability to a variety of meat systems. With its high viscosity and solubility, Emulsipro® 90e hydrates rapidly and forms heat stable emulsions. Emulsipro® 90e emulsifies fat and moisture and contributes to a firm finished product texture.

Emulsipro® 90e can be added to meat systems in one of three ways:

- Pre hydrated gel (1:4)
- Dry addition
- Fat emulsions (1:5:5)

Emulsipro® 90e is backed by the Crown National "Microsafe®" food safety program and is guaranteed to deliver safety, consistency and performance.

Emulsipro® 90e can be used to create a stable fat emulsion which is then incorporated into the processed meat product, for example French Vienna and Russians. Using a fat emulsion enhances the stability of the final product in which the fat emulsion has been used as there is little chance of fat separation occurring.

A TYPICAL FAT EMULSION (1:5:5)

Emulsipro® 90e 1.000 kg Fat 5.000 kg Water 5.000 kg

- 1. Add water to bowlcutter and while running at slow speed, add the Emulsipro® 90e to the water.
- 2. Once all the Emulsipro® 90e has been added, run the cutter at high speed for 2 3 minutes or until smooth.
- 3. Stop the cutter and open the hood to scrap off any dry Emulsipro® 90e that may be sticking there. Add it back to the cutter.
- 4. Run the cutter at slow speed and add the preminced fat. Distribute evenly.
- 5. Once all the fat has been added run the cutter at high speed for a further 2 3 minutes or until smooth and glossy.
- 6. Remove the fat emulsion from the cutter and place in the cold room. Ensure good airflow to speed up the cooling of the fat emulsion.
- 7. Use fat emulsion within two days of manufacture.



EMULSIPRO® 90e Soya Protein Isolate (For Use in Food Stuffs)

ingredients for life®

Providing Texture and Emulsion Stability to Meat Systems

Emulsipro® 90e is a soya protein isolate which is derived from the finest non-GMO raw material. Emulsipro® 90e is specially designed for use within the meat, poultry and fish industry. Emulsipro® 90e is used in emulsion type products providing emulsification, water binding and texturising properties. Emulsipro® 90e hydrates rapidly and forms heat stable emulsions. Emulsipro® 90e provides meat processors to optimize cook yields without sacrificing eating qualities.

PRODUCT CODE: 5505247





Functional Properties	Benefit
Optimise Cook Yields	Maintains moisture bindingImproves textureIncreased cook yieldIncreased fat binding
Economics	Lean meat replacementCost reductionReduce purge, increased yield
Texture	Stabilize fat and moistureAids in product firmness

Application:

For use in Viennas, French polonies, Russains, hams and in the manufacture of fat emulsions.

Typical Fat Emulsion:

Meat Block:	
Emulsipro® 90e	1.00 kg
Water	5.00 kg
Fat	5.00 kg
Total Batch	11.00 kg

Advantages of using Emulsipro® 90E are:

- Economical offers cost reduction of the end product
- Functional provides emulsification, water binding and texturising properties
- Product Quality reduces cooking losses, prevents fat cook out, improves texture, slicing and yield.
- **Nutrition** can aid in the reduction of fat and calories in the final product.
- **Storage** in dry from, does not require cold storage
- Flavour bland flavour



Cooked & Cured Meat Products Cooked



Vienna Sausages

How To Make Viennas Using The Bowlcutter Method

PREPARATION:

- 1. Pre-mince lean beef and lean pork through 3 mm plate and chill to 0° C.
- 2. Pre-mince spek through 3 mm plate and chill to 0° C.
- 3. Open Crown Batch Pack and remove curing salt component.

METHOD:

- 1. Place minced lean beef and lean pork in bowlcutter, add curing salts from Crown Batch Pack and cutter for a few revolutions.
- 2. Add half of the ice and cut to fine emulsion on high speed until good binding is achieved (max 6° C).
- 3. Add remaining ice, spek and rest of Crown Batch Pack and cutter until a temperature of 12° C is reached.
- 4. Remove emulsion from bowlcutter and place meat mixture into the filler. Fill into desired casing.
- 5. Dry at 55° C, hot smoke at 65° C until desired smoke colour is achieved.
- 6. Cook at 75° C to an internal core temperature of 72° C.

How To Make Viennas Using The Mincer Method

METHOD:

- 1. Pre-mince Beef, Pork and Spek together with salt pack through 3,0 mm plate and chill.
- 2. Mix in remainder of Crown Batch Pack and all of the ice to the above.
- 3. Mince a further 2 to 3 times through the 3,0 mm plate.
- 4. Fill into Viscofan cellulose transferable or non-transferable casings or Viscofan Narurin NDX collagen casings.
- 5. Dry at 55° C, hot smoke at 65° C, cook at 75° C to an internal core temperature of 72° C.
- 6. Peel and pack.
- 7. Chill in iced water.





Vienna Sausages

OP SELLER

Regal Vienna 60

Ideal for the small to medium sized factory. A traditional Vienna profile comprising nutmeg, coriander, black and white pepper, ginger, garlic, onion, and mustard. Includes curing salts, cure accelerator, MSG and Vegamine[®]. Batch size suits a 60 litre bowlcutter operation.

2 kg CODE: 3608000

MEAT BLOCK

Lean Beef10.0 kgLean Pork10.0 kgFat12.0 kgIce Water11.0 kg

Regal Vienna 60

Batch Pack 2.0 kg

TOTAL 45.0 kg

TOP SELLER

Meister Club® Vienna

A superior quality traditional vienna flavour. Suitable for 20 litre bowlcutter operations. Flavour profile comprising mace, black and white pepper, onion, and mustard. Includes curing salts, cure accelerator, Emulsipro® 90e, and Vegamine® for that meaty flavour.

1 kg CODE: 5003200

MEAT BLOCK

 Beef / Pork
 (90:10)
 7.300 kg

 Fat Emulsion
 4.400 kg

 Ice Water
 4.400 kg

 Seas 'n Smoke (Optional)
 0.035 kg

Meister Club® Vienna

Batch Pack 1.000 kg

TOTAL 17.135 kg

Chicken Vienna

A great variation to the Vienna Sausage. Made from chicken, it is a nutritional vienna full of flavour. Delicious.

CODE: 4430416

1 kg

USAGE

15 kg sufficient for 250 kg finished product.

Gold Crown® Vienna

A top quality vienna, strongly flavoured; containing nutmeg, coriander, cayenne pepper and onion powder.

1 kg CODE: 4408195

MEAT BLOCK

 Lean Beef
 (90:10)
 3.5 kg

 Lean Pork
 (90:10)
 3.5 kg

 Fat
 3.5 kg

Ice 3.5 kg Gold Crown® Vienna Batch Pack 1.0 kg

TOTAL

15.0 kg

Cooked & Cured Meat Products Crown



Frankfurters

	Meister Club® Frankfo	urter	N	1EAT BLOCK	(
SELLER	Superior traditional German	frankfurter flavour.	Beef / Pork	(90:10)	2.000 kg
昌		Pork	(75:25)	4.000 kg	
			Fat Emulsion		4.000 kg
TOP			Ice Water		4.500 kg
			Seas 'n Smoke	(Optional)	0.035 kg
			Meister Club® I	Frankfurter	
			Batch Pack		1.000 kg
	1 kg	CODE: 5003208	TOTAL		15.535 kg





French Polony

How To Make French Polony Using The Bowlcutter Method

PREPARATION:

- 1. Pre-mince lean beef and lean pork through 3 mm plate and chill to 0° C.
- 2. Pre-mince spek through 3 mm plate and chill to 0° C.
- 3. Open Crown Batch Pack and remove curing salt component.

METHOD:

- 1. Place minced lean beef and lean pork in bowlcutter, add curing salts from Crown Batch Pack and cutter for a few revolutions.
- 2. Add half of the ice and cut to fine emulsion on high speed until good binding is achieved (max 6° C).
- 3. Add remaining ice, spek and rest of Crown Batch Pack and cutter until a temperature of 12° C is reached.
- 4. Dissolve 5 grams of Butcher's red into 50 ml boiling hot water. Mix well and add to ice water mixture.
- 5. Remove emulsion from bowlcutter and place meat mixture into the filler. Fill into Crown French Polony casings.
- 6. Cook at 75° C to an internal core temperature of 72° C. Cool in cold water.

How To Make French Polony Using The Mincer Method

METHOD:

- 1. Pre-mince beef, pork and spek together with salt pack through 3,0 mm plate and chill.
- 2. Mix in remainder of the Crown Batch Pack and all of the ice to the above.
- 3. Mince a further 2 to 3 times through the 3,0 mm plate. Fill into desired casings.
- 5. Cook at 75° C to an internal core temperature of 72° C.

French 500 g : Approx. 45 minutes French 1 kg : Approx. 2 hours French 3 kg : Approx. 3 hours

6. Chill in iced water.

2	
Щ	
=	
ш	
S	
•	
O	

Regal French Polony 60 MEAT BLOCK Ideal for the small to medium sized factory. Lean Meat Spek / Fat 10.5 kg Ice 10.5 kg 10.5 kg Regal French Polony 60 Batch Pack 2.0 kg 2 kg CODE: 3608002 TOTAL 45.0 kg

M	leister	Club	® Frenc	h Po	lony
10	ICIOLCI	Club	1 1 5 1 1 6 1		ICJIIV

Well established market leader. Designed to suit a 20 litre bowlcutter operation. Flavour comprises encapsulated mace, nutmeg, pepper, coriander, clove, ginger, mustard powder, garlic powder and includes curing salts, cure accelerator, flavour enhancer, Emulsipro® 90e and specialised phosphates for stable emulsion formation. Product is MSG free.

1 kg CODE: 4408620

MEAT BLOCK		
Lean Meat	7.3 kg	
Spek / Fat Emulsion	4.4 kg	
Ice / Water	4.4 kg	
Meister Club® French Polony		
Batch Pack	1.0 kg	
TOTAL	17.1 kg	



Meat Loaves

How To Make Gold Crown® Pressed Loaf Using the Mincer Method

PREPARATION:

- 1. Mince 5 kg meat through 4.5 mm plate and chill to 4° C.
- 2. Mince 5 kg meat through 13 mm plate and chill to 4° C.

METHOD:

- 1. Mix water, curing salts and Crown Batch Pack together. Stir away lumps using a whisk, if necessary.
- 2. Add to all the meat and mix well until water is absorbed.
- 3. Refrigerate overnight.
- 4. Following day mix through once by hand.
- 5. Fill into Crown loaf casings, prior to inserting into loaf form.
- 6. Cook at 75° C till core temperature of 72° C.

	Gold Crown® Presse	d Loaf		MEAT	BLOCK	
TOP SELLER	A complete blend containin ingredients required to prep loaf. Formulated to ensure r minimize cooking loss. Also cure accelerator, Emulsipro®	pare a superb pressed neat adhesion and includes curing salt,	Meat Ice Water Gold Cro Loaf Batc	wn® Presse	1.5 kg 10.0 kg 6.5 kg d 1.5 kg	6.0 kg 40.0 kg 26.0 kg
	1.5 kg	CODE: 4408420	TOTAL		18.0 kg	72.0 kg

Regal Beef Loaf 150)	MEAT BLOCK	
A simple combination of c and bay leaf with a beefy fi includes curing salt, cure a 90e and phosphates to en- Formulated to ensure mea cooking loss.	avour enhancer. Also ccelerator, Emulsipro® sure emulsion stability.	Meat Ice Water Regal Beef Loaf 150 Batch Pack	12.0 kg 5.0 kg 1.0 kg
1 kg	CODE: 3608008	TOTAL	18.0 kg



Reformed Ham

How To Make Universal Ham Using The Bowlcutter Method

METHOD:

- 1. Mix 20% ice, 80% water and put into bowlcutter.
- 2. Add soya isolate (Emulsipro® 90e).
- 3. Start slow speed, run 6 7 rounds.
- 4. Add Crown Universal Ham Batch Pack and starch, run for 1 2 minutes until well emulsified.
- 5. Mince lean pork 80/20 through 13 mm or 8 mm plate. Put into mixer or tumbler, add emulsion made in bowlcutter; mix continuously for 2 hours.
- 6. Fill into casing, cook at 76° C until internal temperature is 72° C. Take out, cool down in cold water, put into chiller over night.

TOP SELLER

Universal Ham 100%

Designed for medium sized meat factories and offers extensions of 100% to 150%. A traditional ham flavour profile of onion, celery and mace with a meaty flavour enhancer. Also includes curing salt, cure accelerator and phosphate to ensure emulsion stability and optimal meat adhesion.

50 kg CODE: 4404207

MEAT BLOCK

Pork (80:20) 25.000 kg
Ice Water 18.000 kg
Emulsipro® 90e 3.300 kg
Potato Starch 1.200 kg
Universal Ham Batch Pack 2.500 kg

OPTIONAL
Taroma Ham 0.150 kg

 Taroma Smoke
 0.025 kg

 TOTAL
 50.175 kg

TOP SELLER

TOP SELLER

Universal Ham 120%

Designed for medium sized meat factories and offers extensions of 100% to 150%. A traditional ham flavour profile of onion, celery and mace with a meaty flavour enhancer. Also includes curing salt, cure accelerator and phosphate to ensure emulsion stability and optimal meat adhesion.

50 kg CODE: 4404207

MEAT BLOCK

 Pork
 (80:20)
 22.500 kg

 Water 80%, Ice 20%
 20.000 kg

 Emulsipro® 90e
 3.500 kg

 Potato Starch
 1.500 kg

 Universal Ham Batch Pack
 2.500 kg

 OPTIONAL

 Taroma Ham
 0.150 kg

Taroma Smoke 0.025 kg
TOTAL 50.175 kg

30 kg CODL. 440420

Universal Ham 150%

Designed for medium sized meat factories and offers extensions of 100% to 150%. A traditional ham flavour profile of onion, celery and mace with a meaty flavour enhancer. Also includes curing salt, cure accelerator and phosphate to ensure emulsion stability and optimal meat adhesion.

50 kg CODE: 4404207

MEAT BLOCK

	MEAL BLOC	JK .
Pork	(80:20)	20.000 kg
Ice Water		22.000 kg
Emulsipro®	90e	4.000 kg
Cassava Sta	rch	1.500 kg
Universal Ha	am Batch Pack	2.500 kg
<u>OPTIONAL</u>		
Taroma Han	n	0.150 kg
Taroma Smo	oke	0.025 kg
TOTAL		50.175 kg



Reformed Ham

How To Make Sandwich Ham Using The Mincer Method

PREPARATION:

1. Pre-mince lean pork through a 13,0 or 20,0 mm plate and chill.

METHOD:

- 1. Add Crown Batch Pack to ice water and once completely dissolved add salt pack from Crown Batch Pack and mix for ±4 minutes.
- 2. Add above mix to meat and mix for ±4 minutes.
- 3. Leave in chiller overnight then give a final mix.
- 4. Fill into suitable casing and if required presses.
- 5. Cook at 75° C to internal core temperature of 72° C.
- 6. Chill product and leave in presses overnight.

Crown	Ham	Pack	80

A complete blend containing everything needed to prepare a superb sandwich ham. Formulated to ensure meat adhesion and minimise cooking loss®. Also includes curing salt, cure accelerator, Emulsipro® 90e and phosphates. Flavour enhanced with Vegamine®.

1.5 kg CODE: 4408014

	WILL II DECCI	•		
Meat	(90:10)	10.0 kg		
Ice Water	6.5 kg			
Crown Ham Pack 80				
Batch Pack		1.5 kg		

MEAT BLOCK

TOTAL 18.0 kg

Meister Club® Ham & Tongue

Flavour comprises cryogenically ground caraway, coriander, paprika, encapsulated onion, ginger, nutmeg and white pepper with a hint of Red Arrow® Smoke and includes antioxidant and flavour enhancer in addition to a flavour intensifier. Also includes curing salt, cure accelerator, Emulsipro® 90e and phosphates to ensure emulsion stability and optimal meat adhesion.

1 kg CODE: 4408635

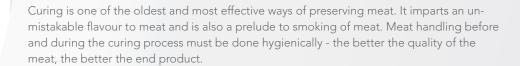
MEAT BLOCK	
Lean Beef	6.0 kg
Lean Pork	4.0 kg
Spek	4.0 kg
Ice Water	4.8 kg
Cured Pork Cubes	2.0 kg
Cooked Tongue	2.0 kg
Meister Club® Ham & Tongue	
Batch Pack	1.0 kg
TOTAL	23.8 kg

62

Cooked & Cured Meat Products Crown



Injected, Pickled and Cured Products



Benefits Of Using Crown Pickling And Curing Products

THEY:

- Add value to your products. Greatly enhance profits.
- Are ideal for quick curing particularly where injection is used.
- Dissolve easily in water.
- Offer an inexpensive method of pickling.
- Impart a smooth, rounded flavour.
- Result in a stable pickled colour.
- Are easy to use.
- Enhance tenderness of meat.
- Increase your product range.
- Increase yields.





Injected, Pickled and Cured Products

Different Types Of Cured Meats



PORK

CURED MEAT	MEAT CUT	PROCESS	BRINE
Eisbein	Shank	Cured and Smoked	Columbit Easy Mix Pump
Bacon	Shoulder, Belly, Loin	Cured and Smoked	CODE: 5406001
Kassler Chops	Loin	Cured and Smoked	Injecto® Bacon F100
Ribs	Ribs	Cured Only, Cured and/or Smoked and/or Cooked	CODE: 5412469 MC Curing Brine S
Gammon	Leg	Cured and Smoked	CODE: 4404457
Ham	Shoulder Deboned	Cured and Cooked	Injecto® Cure B20
	Leg Deboned	Cured, Cooked and or Smoked	CODE: 5412470
Rolled Ham	Breast, Belly	Cured, Rolled, Smoked and Cooked	



BEEF

CURED MEAT	MEAT CUT	PROCESS	BRINE
Corned Beef	Rump, Brisket, Silverside, Aitchbone	Cured and/or Cooked	Columbit Easy Mix Pump CODE: 5406001
Smoked Beef	Silverside, Topside, Brisket	Cured and Smoked	MC Curing Brine S CODE: 4404457
Pastrami	Brisket, Aitchbone	Cured, Spiced and Cooked	Injecto® Cure B20
Tongue	Tongue	Cured and/or Cooked	CODE: 5412470



MUTTON

CURED MEAT	MEAT CUT	PROCESS	BRINE
Ham	Leg	Cured, Cooked and/or Smoked	Columbit Easy Mix Pump CODE: 5406001
			MC Curing Brine S CODE: 4404457



5.5 kg

Injected, Pickled and Cured Products

TOP SELLER

TOP SELLER

Meister Club® Injecto® Bacon F100 Designed for medium to large meat processors.

A phosphated curing brine with cure accelerator

Water 100 Litres Salt 8.0 ka

RECIPE

Meister Club® Injecto® Bacon F100 Batch Pack

Inject 20 to 25 % into pork meat.

and a hint of Red Arrow® Smoke for flavour.

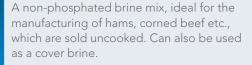
CODE: 5412469 5.5 kg

Crown Brine Mix

RECIPE

1.0 kg 12.0 kg Chilled Water 69.6 kg 5.8 kg Crown Brine Mix 1.0 kg 12.0 kg

RECIPE Add 10.24 kg of Crown Fresh Meat





- Dilute as above.
- Inject up to 25 %.

1 kg 12 kg CODE: 5411114 CODE: 5411122

Crown Fresh Meat Brine

Used to improve the yield of fresh meat products when cooked, and assists the shelf life of the product by including hydrocolloid technology to ensure maximum water binding capacity with minimum weight loss on cooking. Formulated to minimise cooking loss incorporating carrageenan technology.



Brine to 100 litres of water. Inject 10 to 15 % into fresh meat.



CODE: 3693474 10.24 kg

Crown Fresh Pump NF









1 kg CODE: 3693479

RECIPE

- Add 1 kg of Crown Fresh Pump NF to 15 litres of water.
- Inject 10 to 15 % into fresh meat.

Crown Pickle Mix

12.5 kg





RECIPE

Chilled Water Crown Pickle Mix 68.0 kg 12.5 kg



- Add 12.5 kg of Crown Pickle Mix to 68.0 kg of chilled water.
- Inject up to 25%.





Injecto® Bacon F100

Processing Technology offers a number of benefits:

- Adds value to your products
- Imparts a smooth, rounded cured flavour
- Results in a stable cured colour
- Improved quality and yields
- Improved texture
- Reduces purge
- Increases your product range

Meatblock:

Meisterclub Club® Injecto®

Bacon Batch Pack 5.50 kg
Salt 8.00 kg
Water 100.00 kg

Application:

Bacon Gammon

Kassler

Roast Beef Cooked Ham

Eisbein



Brine Preparation:

- Dissolve Meister Club® Injecto® Bacon Batch Pack in all of the water.
- Mix well.
- · Add salt and mix until dissolved.
- Maintain brine temperature at 3-4° C.
- Inject 20-25% by weight of meat







PRODUCT CODE: 5412469



Injected, Pickled and Cured Products

Easy Pump

Ideal for pickling meat cuts at 20% extension. Not to be used as a cover brine.



RECIPE

Water Easy Pump 10 Litres 1.4 kg



Add 1.4 kg of Easy Pump to 10 Litres
 Water

• Inject up to 25 %.

1.4 kg CODE: 5406001

Meister Club® Curing Brine S

A flavoured, phosphated curing brine with cure accelerator. Flavoured with mace, celery and onion.



RECIPE

Water 50.00 kg
Brown Sugar 1.75 kg
Salt 4.00 kg
Meister Club® Brine S



2.20 kg

• Inject 20 to 25 %.

2.2 kg CODE: 4408457





Russians, Cooked Salami & Smokies

How To Make Russian/Cooked Salami Using The Bowlcutter Method

PREPARATION:

- 1. Pre-mince Pork and Beef 80/20 through a 3,0 mm plate.
- 2. Pre-mince Beef 70/30 and Pork 50/50 through a 13 mm plate and chill.
- 3. Open Crown Batch Pack and remove curing salt component.

METHOD:

- 1. Cutter 3 mm minced meat with salt pack ± 4 revolutions.
- 2. Add 1/2 of ice and cutter at high speed until good binding is achieved.
- 3. Add rest of Crown Batch Pack and once well mixed in, add rest of the ice and complete cuttering.
- 4. On slow speed add coarse minced Beef and Pork and cutter to ±5 mm particle size.
- 5. For cooked salami add 2 g / kg whole mustard seed and run on slow speed for 3 revolutions.
- 6. Fill into either 32/34 Gold Crown® Hog Casing or Fibrous Salami Casings.
- 7. Dry at 55° C, hot smoke at 65° C till desired colour is achieved.
- 8. Cook at 75° C to internal core temperature of 72° C.
- 9. Chill product in iced water.



Cooked & Cured Meat Products CROWN



Russians, Cooked Salami and Smokies

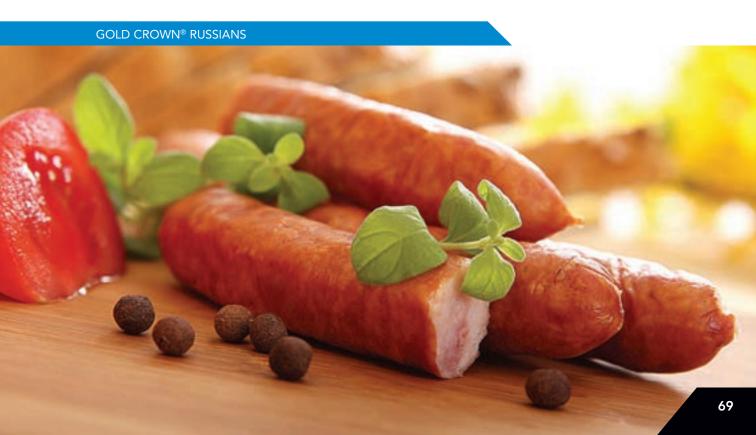
How To Make Russian/Cooked Salami Using The Mincer Method

PREPARATION:

- 1. Pre-mince Pork 80/20 and Beef 80/20 through 3 mm plate.
- 2. Pre-mince Beef 70/30 and Pork 50/50 through 8 mm plate and keep separate.
- 3. Open Crown Batch Pack and remove curing salt component.

METHOD:

- 1. Add salt pack to Pork 80/20 and Beef 80/20 and mix thoroughly. Mince through a 3 mm plate to achieve good binding.
- 2. Mix remainder of Crown Batch Pack, all of ice and mince twice through 3 mm plate.
- 3. Add Beef 70/30 and Pork 50/50 to above, mix well and mince through 4,5 mm plate.
- 4. Fill into Gold Crown® Hog Casing 32/34 for Russians or Fibrous Salami Casings for Cooked Salami.
- 5. Dry at 55° C, hot smoke at 65° C until desired colour is achieved. Cook at 75° C to internal core temperature of 72° C.
- 6. Chill product in ice water.



Cooked & Cured Meat Products CROWN



Russians, Cooked Salami and Smokies

TOP SELLER

Meister Club® Russian Cooked Salami

Strong Russian flavour with pepper and garlic. This recipe dates back more than 20 years and is an outstanding seller, popular with meat factories both small and large, and has been customised for specific large manufacturers over the years. Batch Pack is flavoured with encapsulated mace, oleorsesin nutmeg, coriander, pimento, garlic, black pepper, cloves, capsicum, ginger, and cryogenically ground caraway and celery. In addition, a flavour enhancer together with a flavour intensifier assist the longevity of the flavour during processing, freeze thaw cycles and prolonged high temperature cooking. Functional ingredients include Prague Powder® curing salt, cure accelerator, phosphates, Emulsipro® 90e for maximum emulsification and stabilisation. The product is packed in laminated foil to preserve the flavour and functionality. This product is available in larger pack sizes for larger bowlcutter operations.

1.2 kg CODE: 3620602

MEAT BLOCK

 Lean Pork
 (80:20)
 3.0 kg

 Lean Beef
 (80:20)
 3.0 kg

 Beef
 (70:30)
 4.0 kg

 Pork
 (50:50)
 5.0 kg

 Ice Water
 4.4 kg

Meister Club® Russian Cooked Salami Batch Pack

1.2 kg

TOTAL 20.6 kg

TOP SELLER

Gold Crown® Russian

A high quality product with a typical Russian flavour, containing pepper, garlic and a hint of caraway.

1 kg CODE: 4408012

MEAT BLOCK

Lean Beef (90:10) 3.5 kg Pork (50:50) 7.0 kg Ice 3.5 kg

Gold Crown® Russian

Batch Pack 1.0 kg

TOTAL 15.0 kg

Crown Smokies

Economical product; ideal for the small to medium size factory. Batch Pack is flavoured with oleoresin technology including onion, garlic, black pepper, capsicum, ginger, with cryogenically ground chilli and pepper. Functional ingredients include Prague Powder® curing salt, cure accelerator and phosphates.

4 kg CODE: 4402453

MEAT BLOCK

 Beef
 18.0 kg

 MDM
 18.0 kg

 Fat Emulsion
 18.0 kg

 Supro 500e
 3.0 kg

 Ice Water
 25.0 kg

 Starch
 4.0 kg

 Crown Smokies Batch Pack
 4.0 kg

TOTAL 90.0 kg

Cooked & Cured Meat Products Crown



Russians, Cooked Salami and Smokies

Meister Club® Kasegriller

TOP SELLER

Superior quality Russian-like sausage rich in cheese. Another winning German recipe that dates back more than 20 years and is an outstanding seller, popular with meat factories both small and large, and has been customised for specific large manufacturers over the years. Batch Pack is flavoured with encapsulated mace, oleorsesin nutmeg, coriander, pimento, garlic, black pepper, cloves, capsicum, ginger, and cryogenically ground caraway and celery. The flavour is enhanced with a flavour intensifier which assists the longevity of the flavour during processing, freeze thaw cycles and prolonged high temperature cooking. Functional ingredients include Prague Powder® curing salt, cure accelerator, phosphates, Emulsipro® 90e for maximum emulsification and stabilisation. The product is packed in laminated foil to preserve the flavour and functionality. This product is available in larger pack sizes for larger bowlcutter operations.



MEAT BLOCK	
Lean Beef	4.5 kg
Lean Pork	4.5 kg
Spek	2.0 kg
Beef Body Fat	1.0 kg
Ice Water	3.5 kg
Cheese	2.0 kg
Meister Club® Kasegriller	
Batch Pack	1.0 kg

CODE: 3620604 1 kg

TOTAL 18.5 kg

Meister Club® Fresh Russian

This recipe dates back more than 20 years and is an outstanding seller, popular with meat factories both small and large, and has been customised for specific large manufacturers over the years. Batch Pack is flavoured with encapsulated mace, oleorsesin nutmeg, coriander, pimento, garlic, black pepper, cloves, capsicum, ginger, and cryogenically ground caraway and celery. In addition, a flavour enhancer with beefy top notes, together with a flavour intensifier and a HVP replacer to assist the longevity of the flavour during processing, freeze thaw cycles and prolonged high temperature cooking. Functional ingredients include Prague Powder® curing salt, cure accelerator, phosphates, Emulsipro® 90e for maximum emulsification and stabilization. The product is packed in laminated foil to preserve the flavour and functionality. This product is available in larger pack sizes for larger bowlcutter operations.

1.2 kg CODE: 3620600

MEAT BLOCK

Lean Pork	5.5 kg
Lean Beef	5.5 kg
Ice Water	4.4 kg
Spek	2.5 kg
Beef Fat	1.5 kg
Meister Club® Fresh	
Russian Batch Pack	1.2 ka

TOTAL 20.6 kg

Cooked & Cured Meat Products Crown

CODE: 3607999



45.0 kg

Russians, Cooked Salami and Smokies

Regal Russian NF

The "Regal Range" was specifically formulated to be used in extended meat blocks which incorporate MDM, and various fat emulsions and gels. Suitable for 60 litre bowlcutter operations, or multiples thereof. Flavoured with cryogenically ground spices only, including nutmeg, caraway, coriander, black pepper, onion powder and paprika for colour. Functional ingredients include Prague Powder® curing salt, cure accelerator and phosphates to maximise protein extraction from the limited meat available in the meat block.

MEAT BLOCK			
Beef	(80:20)	12.0 kg	
Pork	(60:40)	17.0 kg	
Spek / Fat En	3.0 kg		
Emuslipro 90e		1.0 kg	
Ice / Water		10.0 kg	
Regal Russian			
Batch Pack 2.0			

TOTAL

2 kg

Russian Precook

The cheaper the block, the stronger is the flavour requirement. This recipe was developed specifically to achieve this specific need and includes oleoresin technology as well as encapsulation. The flavour profile is based on Indonesian nutmeg and mace, East European coriander, celery, Sarawak black pepper, Chinese garlic and ginger, Canadian mustard, a zing of Long Slim African Chilli and Red Arrow® smoke flavour. Functional ingredients include Prague Powder® curing salt, cure accelerator and phosphates to maximize protein extraction from the limited meat available in the meat block.

7.2 kg CODE: 4408687

DOSAGE RATE

7.2 kg of Russian Precook is sufficient for 180 kg finished product.

NOTE: Contact your Crown National representative for extended meat blocks that can be used to achieve your cost criteria when using Meister Club® Premium Kasegriller.

Food Ingredients

Meat Snacks



Introduction

Meat snacks is a growing segment and for most South Africans, biltong and dry wors remains the most popular snack food. This popular delicacy is synonymous with a rich South African tradition.

Originating from the need to preserve meat, the Boers hung salted and spiced strips of game meat from their wagons while out hunting or on the trek. Dry wors, dried "Boerewors" originated in much the same way. The regional flavour preferences we experience today is a result of different spices that were available to the trek boers as they move into new areas.

Whatever your preference Crown National will be able to help you to discover the great taste that we have to offer.





Biltong and Chilli Bites

How To Make Biltong And Chilli Bites

METHOD:

- 1. Remove all visible connective tissue from meat.
- 2. Cut meat into long strips approximately 25 mm thick for biltong and ± 8 mm for chilli bites.
- 3. Place meat in layers in a suitable container and sprinkle Crown biltong or Crown chilli bite spice of your choice over each layer according to usage.
- 4. Sprinkle with Crown Vinegar and leave overnight in a cool area.
- 5. Hang to dry in a Crown Biltong Dryer. For the first 12 hours, do not engage the heat unit.
- 6. Dry at optimum temperature of 30°C.
- 7. Weight loss of up to 50% can be expected.

SELLER

Safari® Biltong

Africa's most popular Biltong seasoning is savoured and favoured in many countries outside Africa, including the USA, Canada, the UK, Australia and even China.



DOSAGE RATE

40 - 50 g Safari® Biltong per kg of cut

1 kg CODE: 4402200 2 kg CODE: 4402192 25 kg CODE: 4408403

OP SELLER

Safari® Chilli Bites

A mixture of coarse coriander and black pepper with a well balanced chilli flavour.



DOSAGE RATE

40 - 50 g Safari® Chilli Bite per kg of cut meat.

2 kg CODE: 4402456

Centenary Biltong

Celebrating 100 years of flavour. Crown National introduces Centenary Biltong. Timeless great flavour!



MEAT BLOCK

Meat28.0 kgCrown Vinegar0.6 kgIce Water0.6 kgCentenary Biltong Batch Pack1.0 kg

1 kg CODE: 4400302 TOTAL

30.2 kg





Dry Wors

How To Make Dry Wors

METHOD:

- 1. Weigh off meat and mince through a 13 mm plate.
- 2. Combine minced meat with a Crown Dry Wors seasoning of your choice and Crown Vinegar.
- 3. Mix well and mince through a 4.5 mm or 3 mm plate.
- 4. Place meat mixture into filler and charge the nozzle with a Gold Crown® sheep casing. Fill.
- 5. Hang dry wors in a Crown biltong dryer.
- 6. Dry at optimum temperature of 30° C.
- 7. Weight loss of up to 50% can be expected.

TOP SELLER

National Dry Wors Seasoning

A typical dry wors seasoning with cloves, nutmeg, pepper and a touch of BBQ. Suitable for venison or beef.



DOSAGE RATE

• 27 g National Dry Wors seasoning per kg of meat.

1 kg

CODE: 4402017

TOP SELLER

Safari® Dry Wors

Seasoned with salt, coriander, black pepper, cloves and nutmeg and other flavours similar to the renowned Safari® Biltong seasoning. Preservative free.



MEAT BLOCK

TOTAL		35.0 kg
Safari® Dry W	ors Batch Pack	1.0 kg
Crown Vineg	ar	0.3 kg
Ice Water		0.7 kg
Beef	(80:20)	10.0 kg
Fat		3.0 kg
Venison		20.0 kg

1 kg

1.2 kg

CODE: 4402789

Centenary Dry Wors

Celebrating 100 years of flavour. Crown National introduces Centenary Dry Wors. Timeless great flavour!



TOTAL

MEAT BLOCK

Meat	28.3 kg
Crown Vinegar	0.5 kg
Centenary Dry Wors Batch Pack	1.2 kg

CODE: 4400303

30.0 kg



Cabanossi

How To Make Cabanossi

EQUIPMENT PREPARATION:

- 1. Ensure that equipment is clean.
- 2. Ensure mincer knives and plates are sharp.

PREPARATION:

- 1. Rinse and soak Gold Crown® casings.
- 2. Pre-mince beef and pork through 8 mm plate and chill to 0° C.
- 3. Pre-mince spek through 5 mm plate and chill to 0° C.

METHOD:

- 1. Mince beef and pork through a 4,5 mm plate, add curing salts from Crown Batch Pack and mix well.
- 2. Mince above mixture again through a 4,5 mm plate. Add Seas 'n Smoke and Meister Club® Country Cabanossi Batch Pack or the Gold Crown® Cabanossi Batch Pack and mix well.
- 3. Add pre-minced spek, mix well and mince through a 4,5 mm plate.
- 4. Fill into Gold Crown® sheep casings and link.
- 5. Hang to dry in a cool area for colour development.
- 6. If a smoking cabinet is available, cold smoke at a temperature not exceeding 20° C.





Cabanossi

TOP SELLE

Meister Club® Country Cabanossi

Flavoured with cryogenically ground spices including nutmeg, caraway, coriander, ginger, black pepper, onion and garlic powder, encapsulated mace, and paprika for colour. Enhanced with Vegamine®, Red Arrow® Hickory Smoke and meaty top notes. MSG free but includes additional functional ingredients such as Prague Powder® curing salt, cure accelerator and phosphates to maximise protein extraction from the meat. The product is packed in laminated foil to preserve the flavour and function.

1.2 kg CODE: 5403510

MEAT BLOCK				
Beef	(90:10)	6.00 kg		
or a combination				
Pork	(80:20)	18.30 kg		
Spek		4.50 kg		
Seas 'n Smoke (optional) 0.09 kg				
Meister Club® Country				
Cabanossi Batch	Pack	1.20 kg		

TOTAL 30.0 kg

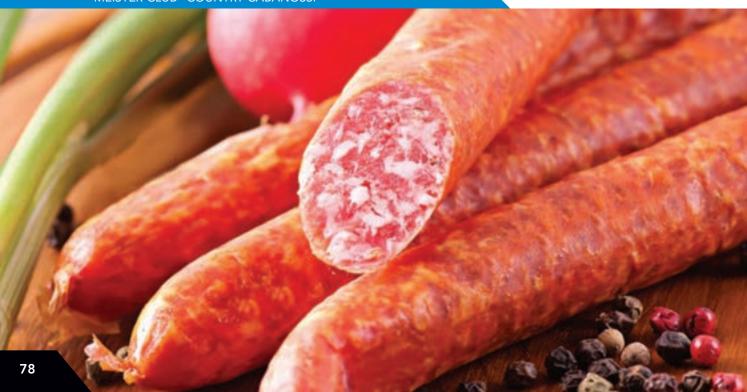
Gold Crown® Cabanossi

Flavoured with cryogenically ground spices, including nutmeg, caraway, coriander, black pepper, onion and garlic powder and paprika for colour. Enhanced with Vegamine® and meaty top notes. But includes additional functional ingredients such as Prague Powder® curing salt, cure accelerator and phosphates to maximise protein extraction from the meat.

600 g CODE: 4408241

MEAT BLOCK					
Beef	(90:10)	7.00 kg			
or a combination					
Pork	(80:20)	3.00 kg			
Spek		4.50 kg			
Ice Water	Ice Water 0.50 kg				
Gold Crown® Cabanossi					
Batch Pack	0.60 kg				
TOTAL 15.6 kg					

MEISTER CLUB® COUNTRY CABANOSSI



Flavour Enhancers and Food Additives



Introduction

DEFINITION: An ingredient, generally regarded as safe at prescribed addition levels, intentionally added to a food product to enhance the properties of the food product and prolong shelf life.

Food additives should not be added to hide bad manufacturing practice or the use of inferior materials.

MSG

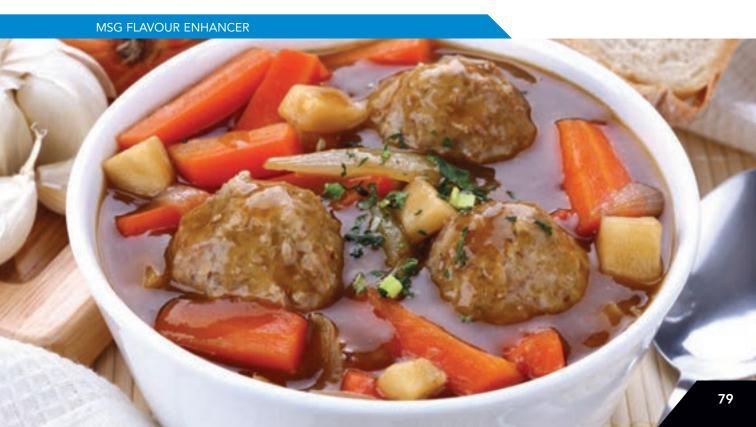
MSG is the sodium salt of glutamic acid. Glutamic acid or glutamate is present in many foods as they come from the field, farm or ranch. Glutamate, like many other components of our food is also produced within the human body. Interestingly, mother's milk is a rich source of glutamate, as is cow's milk, meat, tomatoes and mushrooms. The high levels of glutamate in mushrooms and tomatoes also suggests this is a reason for these products being widely used in food preparation.

As glutamate is produced by the body, any added glutamate introduced into the digestive system in food products, is metabolised by the body as it would metabolise the glutamate produced in the body.

MSG has the remarkable property of enhancing or "waking up" flavour in foods. The latest buzzword in food flavour circles, Umami is a Japanese term describing good taste and deliciousness.

Translated, "Umami" Uma = good Mi = taste

"Umami flavours" are being developed using ingredients that have naturally high glutamate content, such as tomatoes and mushrooms.



Food Ingredients

Flavour Enhancers



MSG

Contains pure monosodium glutamate. Use as a flavour enhancer in all savoury dishes.

1 kg CODE: 5416205 25 kg CODE: 5446252

DOSAGE RATE

• According to taste.

Vegamine 184

Used as a flavour enhancer in meat products, soups, sauces and gravies.

1 kg CODE: 4699017 25 kg CODE: 4699025

DOSAGE RATE

• Use 1 - 3 g Vegamine 184 per kg end product.

Spice-O-Mat

Use before or after cooking to add an exciting flavour to meat, poultry, fish and vegetables.

200 g CODE: 4402378 1 kg CODE: 4694678

DOSAGE RATE

According to taste.





Chip White

Used to retard the browning of freshly cut potato chips and other vegetables.

1 kg CODE: 5416051 5 kg CODE: 5416140

DOSAGE RATE

 Dissolve 10 g of Chip White per litre of water. Soak chips for 15 minutes.

Continental Fix Fresh

Used in processed and fresh meat products to enhance shelf life and red colour. Prevents discolouring and retards rancidity. Use in combination with Prague Powder® to effect a better cured colour. Retards microbial growth.

1 kg CODE: 5003075

DOSAGE RATE

- Use 3 5 kg/kg of emulsion. For fresh sausages (with no other preservative present): 3 g/kg finished product.
- Sprinkle on meat off-cuts and mix by hand. Can be left up to 2 days before using.
- Wash carcasses with 5 g/litre to prevent
- sliminess on outside.
- Soak equipment in 7 g/litre water to retard microbial growth.

Crystals

Used as a preservative in fresh meat products such as hamburgers, pork and beef sausages, boerewors etc.

2 kg CODE: 5416167

USAGE

• 90 g Crystals per 100 kg end product.

Fresh Red

Fresh Red can be used in fresh sausages where no other preservative is present. Extends shelf life and enhances colour. Prevents meat from discolouring and fats from going rancid.

2 kg CODE: 5406002 8 kg CODE: 5406000

DOSAGE

• 2.5 g - 3 g of Fresh Red per kg end product.

Preserva

Used in fresh meat products eg. burgers and sausages. Enhances shelf life and colour and retards rancidity. Inhibits the growth of various food poisoning and spoilage micro organisms.

1 kg CODE: 4402001

DOSAGE RATE

- Use 190 g of Preserva per 50 kg of finished product (this is the maximum amount allowed by legislation and should not be exceeded).
- Should not be used in conjunction with Batch Packs.



Cutterfos

Cutterfos reacts with meat protiens to hold moisture during processing. This results in improved yields, tenderness and juiciness.

1 kg CODE: 4017056

DOSAGE RATE

• 3 g Cutterfos per kg end product.

Dualrot NF

Used in processed and Salami meat products for colour enhancing.

1 kg CODE: 5406022

DOSAGE RATE

• Use 2 - 3 g of Dualrot NF per kg of final product.

Gelatine 75

Pure gelatine, ideal for use in brawn.

DOSAGE RATE

• 5 g - 25 g Gelatine per 250 ml hot water.

5 kg CODE: 5406007

Kolorade

Butchers Red in liquid form. Provides a red colour in extended emulsified products.

5 Litres CODE: 5416000

DOSAGE RATE

• 5 - 10 ml Kolorade per 20 kg end product.

Tender Plus®

Tender Plus® is a multifunctional system designed to increase yields, improve tenderness and juiciness to all types of meat. Can be applied to the meat through injection, tumbling or as a cover brine.

1.3 kg CODE: 5411139

DOSAGE RATE

• Add 1.3 kg Tender Plus® to 20 Litres water.

TENDER PLUS®



Tender Plus® is a multifunctional ingredient system designed to increase yields, improve tenderness and juiciness to all types of meat. Tender Plus® is easy to use, dissolves quickly in water with no separation of ingredients within the brine.

PRODUCT CODE: 5411139

This new processing technology offers a number of benefits:

- Ease of brine preparation
- Ease of diffusion
 - By injection
 - By tumbling
 - By cover brine
- Enhanced tenderness and juiciness
- No off taste
- Increased yield and profit
- Control of bacteria growth

Application:

- As a brine for injecting whole meat pieces
- As a brine for tumbling smaller meat pieces
- As a cover brine

Method:

Add 1,3 kg Tender Plus® to 20 kg water

Recommended injection/ tumbling rates		
Meat	Rate	
Beef	12%	
Pork	10%	
Chicken	10%	
Lamb	8%	

Where Tender Plus® can be used:

- Roasts Kebabs Stir Fries Ribs
- Chicken Breasts Steaks Cubes









Product Code:

4050096 2 kg pack size 4050223 25 kg pack size

Technology:

For use in cured meat products which have longer curing times in the manufacturing process. A combination of Sodium Nitrite and Sodium Nitrate gives a source of additional nitric oxide, should the nitrate be depleted during the curing process. Nitric oxide reacts to produce the desirable and stable pink pigment of cured meat.

Application:

A nitrite curing salt to preserve meat and stabilise the pink cured meat colour upon cooking or heating.

Properties:

Stable curing colour development over longer periods
Good colour stability
Provides preservation
Increases shelf life

Recommended Usage:

3g/kg final product
Existing food regulations must be observed

Recipe for cover brine		Recipe for semi-dry cure	
Water	100 kg	Salt	70 %
Salt	8 kg	Sugar	15 %
Prague Powder®	3.5 kg	Prague Powder	® 15 %

Storage:

Cool, dry conditions away from direct sunlight, in an insect and pest-free warehouse

Temperature: 15 - 25° C

Additional Information:

Product suitable for Halaal foods Product suitable for Kosher foods





Product Code:

4050224 2 kg pack size 4050225 25 kg pack size

Technology:

For use in cured meat products which have shorter curing times in the manufacturing process. Sodium Nitrite reacts quickly to form nitric oxide; nitric oxide reacts to produce the desirable and stable pink pigment of cured meat.

Application:

A nitrite curing salt to preserve meat and stabilise the pink cured meat colour upon cooking or heating.

Properties:

- Fast curing colour development
- Good colour stability
- Provides preservation
- Increases shelf life

Recommended Usage:

- 2g/kg final product
- Existing food regulations must be observed

Storage:

- Cool, dry conditions away from direct sunlight, in an insect and pest-free warehouse
- Temperature: 15 25° C

Additional Information:

- Product suitable for Halaal foods
- Product suitable for Kosher foods









Prague Powder®

Prague Powder® is a curing agent used in cured meats which have longer curing times. It is responsible for the formation of the characteristic pink colour of cured products upon cooking/heating. It also contributes to the flavour of cured meats.

2 kg CODE: 4050096 25 kg CODE: 4050223

DOSAGE RATE

• 2 g Prague Powder® per kg end product.

Prague Powder® NN

Prague Powder® NN is a curing agent used in cured meats which have shorter curing times. It is responsible for the formation of the characteristic pink colour of cured products upon cooking/heating. It also contributes to the flavour of cured meats.

2 kg CODE: 4050224 25 kg CODE: 4050225

DOSAGE RATE

 2 g Prague Powder[®] NN per kg end product.





Crown ProTex

Crown ProTex is a high quality textured soya protein with a protein content of 52% and is available in several particle sizes and colours. Crown ProTex is bland in flavour and is used in a variety of applications such as wors, meat balls, burgers, savoury mince and processed meat products.

Crown ProTex uncoloured mince CODE: 5401015 20 kg uncoloured fines 20 kg Crown ProTex CODE: 5690007 coloured mince 20 kg Crown ProTex CODE: 5505012 coloured fines 20 kg Crown ProTex CODE: 5401015

Eezypro® Blend

A functional hydrocolloid ingredient system for the elimination of syneresis and purge in processed products such as Vienna sausages, and for the elimination of fat caps in polonies.

25 kg CODE: 4408440

DOSAGE RATE

Hydrate 1 kg Crown ProTex with
 2.5 kg - 3 kg water.

DOSAGE RATE

• Dependant on the extent of the syneresis, use between 0.5% to 2% of the mass of the emulsion.

Emulsitex® F

Emulstitex® F is used in processed meats and fresh meat products as well as bakery, health food and canned products. It has excellent nutritional characteristics and reduces shrinkage and offers a cost reduction of the end product.

25 kg CODE: 5505041

MEAT BLOCK

 Beef
 9.500 kg

 Pork
 10.000 kg

 Spek
 11.000 kg

 Ice
 12.500 kg

 Emulsitex® F
 0.500 kg

 Regal Vienna Batch Pack
 2.000 kg

TOTAL 45.500 kg



EMULSITEX®F Soya Protein Fibre (For Use in Food Stuffs)

ingredients for life®

The answer to reducing the cost of meat products

- Emulsitex® F is a light cream, bland dietary fibre which is low in fat.
- Emulsitex® F is derived from the cell wall material of the soya bean cotyledon.
- Emulsitex® F consists of both soluble and insoluble fibre and protein, resulting in its ability to absorb water.
- Emulsitex® F has a high water absorption capacity of 8-9 times.
- Emulsitex® F ensures moisture management while maintaining taste, texture and reducing cost.
- Emulsitex® F has the ability to retain moisture and reduce cooking losses making Emulsitex® F suitable for use in processed meats and fresh meat products.
- Emulsitex® F can also be used in bakery products, health foods and in canned products.

PRODUCT CODE: 5505041



Functional Properties	Benefit
Water Binding	 Cost reduction Improved cook yield Reduced shrinkage Better consumer acceptance Increased shelf life
Texture	Better mouth feelJuicy end product
Process	• Easy to use

Application:

Hydrate 1 kg of Emulsitex® F with 8 parts water. Then add 5 kg of Emulsitex® F to the Meat Block.

Typical Recipe:

Meat Block:		
Meat	(80:20)	35.00 kg
Water		10.00 kg
Hydrated Emulsitex® F (1+8)		5.00 kg
BBQ Beef Batch Pack		3.25 kg
Total Batch		53.25 kg

Advantages of using **Emulsitex®F** are:

- Economy offers a cost reduction of the end product.
- **Greater cook yield** reduces shrinkage by binding moisture.
- **Nutrition** has a protein content with excellent nutritional characteristics.
- **Handling** does not require any special treatment prior to its utilisation.
- **Storage** in dry form does not require cold storage.
- Flavour bland flavour.





Emulsipro® 90e (Soya Protein Isolate)

Functional - provides emulsification, water binding and texturising properties.

Economical - offers cost reduction of the end product. Product quality - reduces cooking losses, prevents fat release, improves texture, slicing and yield.

Flavour - bland in taste.

Nutrition - can aid in the reduction of fat, calories and cholesterol in products.

Depends on application and total meat equivalent requirements.

20 kg CODE: 5505247

Response[®]

Response is a 70% textured soya protein concentrate and has a granular like structure. Response is a versatile food ingredient, primarily due to its functional and nutritional properties which serves to enhance the value of finished food products. Response is used to partially replace meat protein in a variety of application. Once hydrated Response has a meat like structure.

DOSAGE RATE

USAGE

 Hydrate 1 kg Response® with 2.5 kg - 3.0 kg water.

 11.34 kg
 Response 4400
 Uncoloured Flake (6.4 mm)
 CODE: 5005316

 11.34 kg
 Response 4412
 Caramel coloured Flake (3.2 mm)
 CODE: 5005317





Soya Protein Isolate

Emulsipro® 90e

Soya protein isolates are the most refined form of soya protein containing 90% protein by dry weight and are virtually carbohydrate and fat free, with no characteristic "beany" flavour. They are a highly digestible source of amino acids and because of their bland taste can be added to foodstuffs without jeopardising flavour or characteristics.

Benefits:

Soya protein isolates provide the following primary benefits in meat applications:

- Functional provides emulsification, water binding and texturising properties.
- Economical offers cost reduction of the end product.
- Product quality reduces cooking losses, prevents fat release, improves texture, slicing and yield.
- Flavour bland in taste.
- Nutrition can aid in the reduction of fat, calories and cholesterol in products.

Application:

Emulsified Meats

- Soya protein isolates excel at stabilising fat and water. This allows processors to take advantage of lower cost, lower functional raw material and still optimise cook yields and reduce purge without sacrificing eating qualities.
- Can be used in fresh polony, viennas, frankfurters, russians, spreads and in the manufacture of fat emulsions.

Hams

- Soya protein isolates make it possible to optimise brine levels while reducing purge, maintaining succulence, texture and sliceability.
- Can be used in the manufature of whole muscle hams and reformed hams.



Soya Derivatives

Textured Soya Concentrate

Response®

Response® is a textured soya protein concentrate obtained through thermic extrusion. Response® soya protein has a granular or flake like structure with a 70% protein content. Response® is a versatile food ingredient, primarily due to its functional and nutritional properties which serves to enhance the value of finished food products.

Benefits:

Response® soya concentrate provides the following benefit in meat applications:

- High quality meat replacer.
- Rheological texture very similar to meat.
- Improved water absorption and retention.
- Improves shelf life.
- Enhances texture.
- Functional binds free fat and water.
- Economical replacement of meat.
- Product quality once hydrated, has a meat appearance.
- Flavour bland in taste.
- Nutrition has a high protein content with excellent nutritional characteristic.

Application:

Response® is used to partically replace meat protein in a variety of applications such as wors, ground beef, stews, sausage rolls, meat balls, burgers and savoury mince.

Hydrate 1 kg Response® with 2.5 kg - 3.0 kg water. When hydrated, Response® has a meat like appearance.



Troubleshooting In Emulsion Products

Fat caps and jelly pockets, green rings and off-odours - these are the nightmares all processors want to avoid in their cured meats.

The following is a checklist to help you search for the cause and find remedies for problems you might come across in making emulsified products.

Consistency Too Hard

This can be from a number of causes. Firstly, the percentage lean and/or connective tissue protein could be too high. This means that excessive rind material may have been used. It can be remedied by using the correct sausage formulation. The second cause could be that too little ice water was used. To remedy, increase the ice water quantity in the formulation. If one is manufacturing under a vacuum, the vacuum could be drawn at too high a level. To rectify this, reduce the vacuum time and intensity. If too much soya protein or starch was used, the consistency will also be too hard; correct the formulation and your problem will be solved.

Consistency Too Soft

In this case, it means not enough connective tissue protein is going into the emulsion. Increase the percentage lean and the ratio of tendon rich meat. Sausage emulsion that is excessively processed in a bowl cutter destructs the connective tissue structure. Keep the required process temperatures in mind throughout the process. The bowl cutter must also be checked for mechanical defects such as blunt cutting edges on the bowl cutter knives. Another remedy to the problem could be to increase the percentage of soya protein or starch used in the formulation.

Fat Caps And Jelly Pockets

This happens because of borderline or unstable emulsion that causes air to be incorporated during the cutting or filling process. These air pockets are then filled with gelatine if the emulsion has borderline stability. If too much collagen protein and insufficient salt myosin protein are used, fat caps and jelly pockets form too. High fat and high collagen ratios have similar consequences.



Troubleshooting In Emulsion Products

Fat Rendering, Fat Pockets And Greasing Out

The breakdown of emulsion could be caused by:

- too much collagen protein used.
- too much frozen meat used.
- overcooking of product.
- too much frozen fat used.
- too much product rework.
- emulsion chopped for too long, so that not enough soluble protein is available to coat and stabilise the fat globules.
- emulsion at elevated temperatures.
- emulsion held too long under pressure before filling.
- emulsion overworked during transfer through pumps and pipes.
- product being underfilled.
- product not filled properly.

If frozen meat is held at -4° to 20° C, the resulting formation of large ice crystals will rupture cell structure and denature the protein. Thus the binding capacity and emulsion stability will be reduced.

Fat Rendering At Tip Of Smoked Sausage

In this case the surface may have a slightly greasy touch as well. The cause could be:

- too much heat during cooking.
- too rapid heating.
- insufficient salt soluble protein to stabilise the emulsion.

With heating, fat globules expand while the protein firms and shrinks, thus the fat ruptures the protein matrix.

Colour: Green Patches

- nitrite burn because of excessive use.
- nitrite burn because of improper distribution thereof.
- undercured due to too short a cooking time.
- undercured due to too low a temperature in the cold curing room.

Colour: Surface Greening

This happens because relatively salt resistant bacteria that are capable of growing at refrigerated temperatures, start growing. The causes could be one of the following:

- improper hygiene of working surface.
- an improper cooking cycle.
- inadequate refrigeration of the finished product.
- freshly prepared products were exposed to product returns.



Troubleshooting In Emulsion Products

Discolouration In Products

This means that air has been included into the casing by either:

- a faulty filling machine.
- a damaged stuffing horn.
- air trapped in the meat emulsion as it was placed in the filler.

Grey Spots

This occurs commonly with discolouration because:

- the curing phase is too short for colour development.
- of an insufficient thermal process.
- cooking was not in line with the casing calibre.

Colour Faded Or Smeared At Time Of Filling

- meat was too warm during cutting in bowl cutter.
- meat was too warm during filling.
- sausage emulsion material left standing too long during the process.

REGAL VIENNA





Troubleshooting In Emulsion Products

Casings Break During Cooking

- correct core temperature of product exceeded.
- product is heated too quickly.
- percentage connective tissue used was too high.
- emulsion was kept in the cold room overnight causing the interior temperatures to be lower than nomal.

In the case of heating the products too quickly, the surface sets and shrinks while the inside remains wet.

Excessive Shrinkage

This happens during cooking because:

- too much fat was used.
- soft fat such as that of pork was over-chopped.
- excessive moisture-loss took place.
- the low water holding capacity of the emulsion.
- PSE pork was used.
- ingredients were not mixed for long enough.

Wrinkling Of Casing

• After refrigeration dip into hot water (90° C) for ± 5 seconds.





Troubleshooting In Emulsion Products

Pale Products

This occurs when the:

- curing dosage level was too low for thorough, lasting colour development.
- smoking process took place under too high a relative humidity.
- smoking process was not long enough.
- sausages are hanging too close together during the smoking process, thus smoke cannot penetrate all of the casing surface.

Lack Of Flavour

This means the levels of spices and seasonings or salt are inadequate. Standardise flavourings by accurate weighing procedures, or use seasonings in pre-weighed unit Batch Packs.

Musty, Weedy Off Odour

This means that there was bacterial growth due to:

- insufficient salt.
- poor hygiene.
- abusive storage temperatures.

Odour, Flavour Or Rancidity

This happens when:

- raw materials are stored for too long and fat materials have already changed to a rancid state.
- there are air leaks in the package.
- storage life is extended for too long.
- the products were exposed to light for too long during storage.
- the product is still moist when packed.
- bacterial enzymes start growing.



Troubleshooting in Fresh Products

It sometimes happens that fresh products such as boerewors, wors etc. take on an unpleasant dark colour soon after manufacture. To prevent this occuring in your products, ensure that you adhere to the following tips:

- 1. Keep to the recommended recipe as the levels of preservatives have been accurately determined for the final product by our Research and Development Laboratory.
- 2. Always thoroughly rinse buckets and containers used to decant tapwater, as they may be contaminated with nitrate dust.
- 3. Always ensure equipment used for the manufacture of fresh products is located well away from the cured/processed products line. This is because curing salts contain nitrate which easily dusts. This will settle on equipment and product, causing contamination. For this reason it is always advisable to wash equipment properly and to additionally rinse equipment before using.
- 4. Saltpetre will cause a curing reaction in the fresh product causing it to darken, looking old and stale. This process will reverse on cooking, giving the cooked product a raw cured appearance. Ascorbic acid can be used to enhance colour.
- 5. Meat quality is the most important factor in the manufacture of fresh products. The use of old/off meat will accelerate the deterioration of colour and product by bacterial growth.
- 6. Always rehydrate/dissolve the Batch Pack in some of the iced water to ensure an even distribution of spices, salt and most importantly, the preservatives in the ingredients.
- 7. Blunt or unpaired knives, blades and plates will cause:
 - a) breakdown of muscle protein, allowing bacteria to multiply rapidly and cause spoilage and discolouration of products;
 - b) heat generation due to the friction, which may result in a pale grey product.



Meister Club[®] Marinades are known for their superior quality and wide array of marinade flavours.

Delicious on meat, chicken, venison or fish, Meister Club[®] Marinades have a flavour to suit every occasion.

Available from all your local Crown National Stores and Leading Butcheries Nationwide.











Introduction

Meister Club® products have established themselves over many years and have become synonymous with superior quality. All Meister Club® products are top of the range and invariably top sellers in their respective fields. The Meister Club® Marinade range is no exception and comprises the most sought after flavours. Available in 4 litre jars and 375 ml bottles.

Advantages:

Increases shelf life by reducing the pH of meat

Increased margin - less meat used per kg sold

Increases the freeze-thaw stability due to special modified starch

Tenderises the meat

- The low pH of marinade breaks the muscle fibres down, softening the structure Retains the moisture of meat

- Oil forms a film coating around meat, keeping all meat juices in-tact
- Hydrocolloids included will reduce moisture loss by picking up the water expelled from the meat, then swelling and trapping it in the marinade's structure

Clings to the meat

- Hydrocolloid included in the formulation assists in binding marinade to the product Meat braais without charring
- Reducing sugars included in the formulation provide a controllable substrate for browning of the meat through the Maillard reaction
- Oil in formulation prevents particles from turning black when cooked over flames

Multifunctional

- Can be used as a marinade due to tenderising ability
- Can be used as a cook-in sauce as it is heat-resistant due to the inclusion of hydrocolloids, which provides stabilisation, suspension and thickness
- Can be used as a pour-on sauce and has high flavour impact when used as is hot or cold

Oil-based

- Meat braais without charring
- Retains moisture of meat

Halaal

- SANHA
- MJC

HACCP accredited factory

Cook 'n Grill® Range contains no added MSG



TOP SELLER

Meister Club® Peri-Peri

Turn up the heat! The ideal sauce for those brave enough to fire up a favourite meal with the spicy taste of chilli.



375 ml

CODE: 8110835

4 litres

CODE: 8110815

100 g Doy Pack

CODE: 8110851

Meister Club® Basting

The Steakhouse favourite.



375 ml

CODE: 8110827

4 litres CODE: 8110807

Meister Club® BBQ

A perfectly balanced combination of traditional braai flavour with a smokey surprise.



375 ml

CODE: 8110826

4 litres

CODE: 8110806

100 g Doy Pack

CODE: 8110850

Meister Club® Egte Sosatie

Packed with fruit from the Boland. Taste the tradition of the Cape with this delicately curried sauce.



375 ml

CODE: 8110828

4 litres

CODE: 8110808

Meister Club® Garlic

Just the way Mama used to make it. A succulent creamy sauce with the fragrant hint of fresh garlic and parsley.



375 ml 4 litres CODE: 8110829

CODE: 8110809





Meister Club® Lemon & Herb

A magnificent mouth-watering taste sensation fresh from the herb garden, with the added bite of refreshing lemon.



375 ml CODE: 8110830 4 litres CODE: 8110810 100 g Doy Pack

CODE: 8110852

CODE: 8110805

Meister Club® Lime & Cilantro

A creamy appearance with green leaves and lemon chunks. Desirable thick consistency with a very aromatic cilantro aroma and a hint of citrus. A well balanced blend of lime and cilantro on a creamy mouthfeel.

4 litres

Meister Club® Mexican Chilli

The spicy alternative that will warm up the taste of any meal. Brilliant colour.



375 ml CODE: 8110831 4 litres CODE: 8110811

Meister Club® Monkey Gland

In a class of its own. This unique South African chutney-style recipe combined with apricots.



375 ml CODE: 8110832 CODE: 8110812 4 litres

Meister Club® Pepper

Prepared with crushed black pepper, this delectable creamy sauce will remind you of the richness of high French cuisine.



375 ml CODE: 8110834 4 litres CODE: 8110814





Meister Club® Prego

Straight from Portugal. A classic Portuguese marinade with a typical floating flavoursome oil layer. A fiery orange colour with large attractive garlic pieces. Onion, chilli, garlic and lemon flavour notes are present with a very hot burn.



375 ml 4 litres CODE: 8110822

CODE: 8110802

Meister Club® Spare Rib

From the American Heartland. The deliciously fruity grill sensation that will keep you coming back for more.



375 ml 4 litres CODE: 8110836

CODE: 8110816

Meister Club® Sweet Chilli

Visually appealing. Onions have been added to complement the flavour. Can be used as a dip as well as a marinade and sauce, with a good mouthfeel.



375 ml 4 litres CODE: 8110821 CODE: 8110801

Meister Club® Sweet & Sour

Opposites in harmony. Delight your taste buds with the exotic taste of the orient with a blend of mild ginger and mixed bell peppers.



375 ml 4 litres

4 litres 100 g

CODE: 8110833 CODE: 8110813 CODE: 8110853

CODE: 8110824

BOX OF 50 X 100 g

Meister Club® Tikka

Hot, eastern flavour made up of fruity, curry and herby notes with a pleasant lingering spicy aftertaste. Rich, red, shiny appearance with garlic and pepper pieces.



375 ml 4 litres

s CODE: 8110804



Meister Club® Cook 'n Grill®



Introduction

Cook and Grill® is a multi-purpose range of sauces for use in casseroles, and stir fries or as a marinade, basting sauce, cook-in sauce or a pour-on sauce. Delicious on meat, chicken, venison or fish, with NO ADDED MSG. Available in 5 litre bottles for back of counter preparation.

Meister Club® Cook 'n Grill®

Fragrant ingredients such as lemongrass and a hint of citrus, in combination with coconut, make this an exotic, scrumptious eating sensation.



5 litres

CODE: 8110749

Meister Club® Cook 'n Grill® Honey & Mustard

A classic combination of natural honey and stone ground mustard, to accompany any white or dark meat dish.



5 litres

CODE: 8110766

Meister Club® Cook 'n Grill® Tandoori

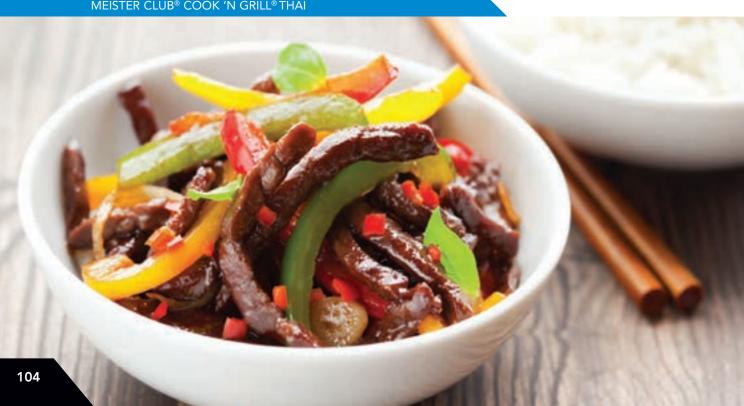
Especially delicious on chicken but also suitable for lamb and beef. A multipurpose sauce comprising apple concentrate, ginger and various spices.



5 litres

CODE: 8110752

MEISTER CLUB® COOK 'N GRILL® THAI



Flavabaste Dry Marinade





Introduction

Flavabaste, as the name says, means basting your meat with flavour! This flavourful range of dry marinades are great for the pocket and great in flavour. Try one of each for a flavourful experience.

USAGE: Add 1 kg Flavabaste Marinade to 5 litres cold water.

₾ .
ш
_
ш
S
₽.
Ō
_

cg CODE: 4695194
g

onions and peach or apricot halves and pour marinade over.		
Flavabaste BBQ		
Ideal for marinading steaks and lamb chops.	1 kg	CODE: 4695186
Flavabaste Lemon & Herb		
Ideal for chicken portions or chicken kebabs.	1 kg	CODE: 4695224
racarror amakemperatura or amakemkesasse.	3	
Flavabaste Spare Rib		
Ideal for pork spare ribs.	1 kg	CODE: 4695216
Flavabaste Spicy Chilli		
Spicy, mouthwatering and pleasantly hot, this marinade is ideal for spatchcock chickens, a variety of meat cuts and chicken livers.	1 kg	CODE: 4695151
Flavabaste Sweet & Sour		
	1 kg	CODE: 4695127
Ideal for pork and chicken, this marinade imparts a traditional, sweet, tangy flavour.	1 kg	CODE. 4073127

Ideal for pork and chicken, this marinade imparts a traditional, sweet, tangy flavour.	1 kg	CODE: 4695127
Flavabaste Tandoori Traditional Indian flavour, ideal for chicken.	1 kg	CODE: 4695178

Grama's® Sauces & Condiments





Introduction

The Grama's® Range of sauces and condiments have established a reputation over many years as economical products of consistent quality and superb flavour.

~	
m	
J	
Ш	
S	
Δ.	
0	
\succeq	

Gramaʻ	${\sf 'S}^{{\Bbb R}}$	Busv	Housev	vife®

A bestseller. One of South Africa's most popular tastes - ideal for all types of meat roasts.

5 litres CODE: 8110222

Grama's® BBQ King Sauce

A firm favourite as a marinade and basting sauce.

5 litres CODE: 8115532

Grama's® Chutney

Adds the right taste to any meat dish.

5 litres CODE: 8110010

Grama's® Mustard Sauce

Intensely flavoured, making it one of the most popular and widely used condiments.

2 litres CODE: 8110046

5 litres

Grama's® Sweet & Sticky Marinade

Delectably sticky - a great way to flavour and tenderise foods.

CODE: 8115682

Grama's® Sauces & Condiments



Grama's® Tomato Sauce

Very economical without sacrificing the

5 litres CODE: 8110260

typical tomato tang.

Grama's® Worcester Sauce

5 litres

CODE: 8115664

Ideal for bulk use.



Something Chunky® Range





Introduction

A superb range of dry marinades with real fruit chunks and ingredient pieces to add flavour and customer appeal. Mix 1 kg Something Chunky® marinades to 2 Litres water.

TOP SELLER

Something Chunky® BBQ

With mild red and green bell pepper pieces.



1 kg

CODE: 4506108

Something Chunky® Chakalaka

With chopped carrot cubes, tomato, sweet bell peppers, cabbage and onion flakes and a dash of Worcester sauce.



1 kg

CODE: 4506123

Something Chunky® Garlic

A great way to add extra flavour. With chunks of tasty garlic.



1 kg

CODE: 4506114

Something Chunky® Lemon & Herb

With colourful, real chunks of tasty lemon.



1 kg

CODE: 4506106

Something Chunky® Mango & Chutney

With real fruit chunks.



1 kg

CODE: 4506110

Something Chunky® Peri-Peri

With chunks of selected red peppers.



1 kg

CODE: 4506109

Something Chunky® Range



Something Chunky® Savoury

With chunks of mild red and green bell peppers.



1 kg

CODE: 4506107

Something Chunky® Sosatie

A mild curry marinade with a fruity flavour.



1 kg

CODE: 4506113

Something Chunky® Sweet Chilli

With a mild red bell pepper, tomato and onion flavour.



1 kg

CODE: 4506124

Vinegars

Brown Vinegar

Has a rich tart taste, but the sweetness covers the tart flavour, making it very mellow.

2 x 5 litres

CODE: 8209641

White Vinegar

White Vinegar has a sharp taste and is the most common and widely used vinegar.

2 x 5 litres

CODE: 8209981

SOMETHING CHUNKY® MANGO & CHUTNEY



Rugby Marinades









DI.	_ D	ш	D	• R	A .	100
Blue	e Bu	IIS.	Bra	aı N	/larır	nade

A delicious marinade that will give you juicy, succulent meat when generously marinated.

375 ml CODE: 8110940

Cheetahs Braai Marinade

A delicious marinade that will give you juicy, succulent meat when generously marinated.

375 ml CODE: 8110942

Lions Braai Marinade

A delicious marinade that will give you juicy, succulent meat when generously marinated.

375 ml CODE: 8110941



Sprinkles and Seasonings



Introduction

Add value and flavour to your products with this exclusive range of Seasonings, Sprinkles and Rubs. These will attract customers and increase sales and profits. They are flavourful, eye catching and are ideal for meat cuts, grills, roasts, soups, sauces, salads, chicken, fish and for spicing up processed meat products.

DOSAGE: The usage of all BBQ seasonings is according to taste.

P SELLE

BBQ Six Gun® Grill

A well balanced blend, containing celery, onion, paprika, cumin and cayenne pepper. Ideal for grilled beef, chicken, lamb as well as potjies, mince and stews.



Batch Pack 1 kg HandiPak 200 g

CODE: 4694636

Sachet 20 g

CODE: 4694637

CODE: 4694643

BBQ King®

This very popular barbeque spice offers a rich red colour and remarkable flavour. Ideal for rotisserie chicken.

Batch Pack 1 kg CODE: 4412095

Batch Pack 5 kg CODE: 4412184

TEXAN STEAK MIX



The perfect ANYTIME spice!



A flavoursome spice ideal for grilled beef, chicken, lamb as well as potjies, mince and stews.





















Sprinkles and Seasonings



BBQ Seasoning

Contains salt, sugar, chilli, cumin, coriander, oreganum, pimento, celery and a hint of curry, especially for the

Batch Pack 1 kg CODE: 4408730

HandiPak 200 g CODE: 4407300

BBQ 'S'® National

A quality barbeque seasoning, containing onion, parsley, (no garlic) and spice extracts on a salt base. Light orange in colour, tasty in flavour with a distinctive bite.

Batch Pack 1 kg CODE: 4402351

BBQ Special

A value-for-money barbeque seasoning, with added cayenne, origanum and garlic powder.

Batch Pack 2 kg CODE: 4402206

BBQ Spice

Add to any meat before cooking and enjoy this tantilising BBQ flavour.

Sachet 100 g BOX OF 10 X 100 G

CODE: 3693531

BBQ Garlic With Lemon

BBQ seasoning with a hint of garlic and lemon.

Batch Pack 1 kg CODE: 4412011

BBQ Fiesta

A well balanced BBQ seasoning. This popular BBQ is used as a sprinkle over all meat cuts and chicken. Batch Pack 1 kg CODE: 4412006

Batch Pack 8 kg CODE: 4412005

BBQ Royal

A BBQ spice that can be added to sausages, chicken, steaks, chops etc. Has a strong grilled meat flavour profile.

Batch Pack 1 kg CODE: 4402066

BBQ Without Garlic

Contains onion powder, cayenne pepper and origanum for added flavour.

Batch Pack 1 kg CODE: 4409051 Batch Pack 5 kg CODE: 4409094

BBQ With Garlic

This BBQ seasoning has an added strong garlic flavour which is perfect for the garlic lover.

Batch Pack 5 kg CODE: 4408071 Batch Pack 1 kg CODE: 4408047

HandiPak 200 g CODE: 4408046

Food Ingredients

Sprinkles and Seasonings



BBQ With Extra Garlic

Typical BBQ seasoning with a definite taste of garlic.

Batch Pack 1 kg CODE: 4408101

BBQ Without Salt

This BBQ spice has great flavour but contains no salt and is great on any meat item.

Batch Pack 1 kg CODE: 4408049

Braai Spice

Add a little or a lot of flavour to your braai meat, spicy with a peppery bite, perfect for any braai occasion.

Batch Pack 1 kg CODE: 4696034

HandiPak 200 g CODE: 4694725

Chakalaka Seasoning

Tangy and zesty with chilli, cumin, garlic, onion, black pepper and sweet bell peppers.

Batch Pack 1 kg CODE: 4441011

HandiPak 200 g CODE: 4402651

Chicken Spice

A delicious barbecue flavour with cayenne pepper notes when sprinkled on chicken prior to roasting, braaiing or cooking. Batch Pack 2 kg CODE: 4402653

HandiPak 200 g CODE: 4402651



Sprinkles and Seasonings



Chip Spice

Sprinkle this seasoning onto chips to give them a tangy spicy flavour.

Batch Pack 1 kg CODE: 4440025

Batch Pack 5 kg CODE: 4412184

Chip White

Used to retard the browning of freshly cut potato chips and other vegetables.

Batch Pack 5 kg CODE: 5416140

Garlic & Herb Sprinkles

This is a wonderful blend of garlic and herbs. Use it on meat, chicken, fish or vegetables. Batch Pack 1 kg CODE: 4412210

Gourmet Universal Sprinkle

This sprinkle is perfect for any meat, fish or vegetable dish. It is wonderful on potatoes too.

Batch Pack 500 g CODE: 4470907

Batch Pack 1 kg CODE: 4470908

Grama's® Chicken Spice

A value-for-money chicken grill seasoning, with added cloves.

Batch Pack 1 kg CODE: 6317502

Meister Club® Greek Sprinkle

Rosemary and garlic, black pepper and oreganum, paprika and coarse salt make this seasoning suitable for lamb, chicken, beef or venison.

Batch Pack 1 kg CODE: 4412241



Meister Club® Peppermix

Its not just any old pepper mix, its made with ASTA® quality Sarawak Black pepper that is especially sorted and cleaned to the specific particle size! Great for steak, chicken, lamb, pork, venison or even roast vegetables.

Batch Pack 1 kg CODE: 4412250



Meister Club® Sweet Chilli Sprinkle

With sweet red peppers, a touch of Birds Eye Chilli and paprika for colour.

Batch Pack 1 kg CODE: 4412260



Pepper Steak Sprinkle

A mixture of flavourful, coarse peppers.

Batch Pack 1 kg CODE: 4412200

Sprinkles and Seasonings



Peri-Peri Hot

Liven up your meat with a generous shake of Peri-Peri Hot; it is a extremely spicy member of our seasonings family. Batch Pack 1 kg CODE: 4694252

Safari® Biltong Seasoning

With its beefy and coriander notes, this seasoning is great for braais, potjies and stews and it produces the perfect mild old-fashioned biltong blend.



HandiPak 200 g CODE: 3693538

Salt & Vinegar Shake CT

The sharp taste of salt and vinegar combined; great on chips, baked potatoes, wedges and salads.

Batch Pack 1 kg CODE: 4408754

Seafood Spice

Fish seasoning with fruit acid, lemon juice flavour, cumin, garlic, mustard, black pepper, and MSG.

Batch Pack 1 kg CODE: 4694449

Spice-O-Mat

An aromatic spice blend that can be added to all your culinary favourites.

Batch Pack 1 kg CODE: 4694678

HandiPak 200 g CODE: 4402378

Steak & Chops

The perfect all-rounder spice for the South African braai.

Batch Pack 1 kg CODE: 4412211

Texan Steak Mix

Legendary steak seasoning with a sweet and slightly aromatic flavour; perfect for steaks and meat on the grill.



So Good® Sprinkles



So Good® BBQ Gizzard Spice	500 g	CODE: 3693709
So Good® BBQ Spice	1 kg	CODE: 3693750
So Good® Chakalaka Sprinkle	900 g	CODE: 3693715
So Good® Chicken Spice	1 kg	CODE: 3693714
So Good® Chip Spice	1 kg	CODE: 3693751
So Good® Mixed Herbs	300 g	CODE: 3693746
So Good® Paprika	700 g	CODE: 3693722
So Good® Parsley	300 g	CODE: 3693741
So Good® Peri-Peri Sprinkle	700 g	CODE: 3693723
So Good® Roasted Vegetable Sprinkle	700 g	CODE: 3693770
So Good® Salt & Vinegar	1.3 kg	CODE: 3693727
So Good® Spice-O-Mat	1 kg	CODE: 3693771
So Good® Turmeric	700 g	CODE: 3693719





And How To Use Them

Introduction

Spices and herbs are among the most prized commodities in cultures around the world. They enhance the natural flavour of foods and are an important part of the food industry. Crown National source only the best quality spices and herbs from around the world, bringing you a diversity of flavours from as far away as Africa, The Middle and Far East, USA, Canada and Australia, as well as great quality spices and herbs harvested locally in South Africa. Turn everyday food into international cuisine with these flavours from around the world:



ALLSPICE

This delicately fragrant spice tastes like a blend of cinnamon, nutmeg, and cloves. Whole - use in pickles, meats, boiled fish and in gravies; Ground - use in puddings, relishes, cakes, pies, biscuits and in many vegetables and sauces.



ANISEED

From a plant of Southern Europe, North Africa, Asia. Licorice flavour. Excellent in seasonings for polony, frankfurters, and pepperoni.



BASIL

A herb of Western Europe, tasty in soups and excellent for flavouring tomato dishes, canned spaghetti sauces and meatballs.



BAY LEAVES

From a laurel tree growing in Eastern Mediterranean countries. Use for pickling, in stews, soups, fish, sauces and gravies, vegetables and in tomato recipes. Excellent in corned beef, chicken loaf and mortadella.



BELL PEPPERS

A mild to sweet fruit. Not very hot and used as a decorative ingredient in all food types including sauces, salad dressings, soups and meat products. Available in red and green fruits.



CARAWAY SEED

From Northern Europe, especially Holland. Use in bread, loaf cake, cheese spreads and in casseroles. Sprinkle on rolls, sauerkraut, cabbage, turnips and asparagus as well as delicatessen prepared meats.



CARDAMOM SEED

From Ceylon or Guatemala, Whole - (a pod containing tiny seeds) for pickling; Ground - spicy flavour in many recipes. For polony, knackwurst, liverwurst and frankfurter.



CAYENNE PEPPER

Ground Capsicum. Used in hot spicy dishes such as chillibites, curries and Eastern type stews and breyani.



CELERY

Flakes, salt and seed - from Europe, India and other countries. Adds zest to eggs, meats, poultry, seafoods, salads, vegetables, sauces, soups, stews and has many other uses.



And How To Use Them



CHILLI

Pepper - from Mexico, Japan, California, South Africa. Little peppers ground and blended for meats, sauces, soups. Powder - hot dishes, seafood, eggs, meats, stews.



CINNAMON

Spicy bark of oriental trees. Whole - for pickling, preserving, in stewing fruits. Ground - for baked goods, cinnamon toast and desserts, also blood sausage and boiled ham.



CLOVES

Nail-shaped flower bud of East Indian clove trees. Whole - used for pickling fruits, spicing syrups, studding pork and ham roasts. Ground - tomato sauces, polony, mortadella, boerewors.



CORIANDER SEED

From Morocco, South Africa, India. Important in pickling. Add to pea soup, cake, biscuits, poultry stuffing. Rub on pork before roasting. Used to season meat products such as boerewors and Polish sausage.



CUMIN SEED

Resembles caraway seed in appearance. Grown in India, Mediterranean region. Whole - boil and pound for Mexican cookery, curry, meat loaf, soups. Ground - same as above. Try cumin in rice, atchaar and shwarmas.



DILL SEED

Imported from India. Used in pickles, cheese spreads and salad dressing. Adds zest to sauerkraut, cabbage, turnips, cauliflower and potato salad; also liverwurst, frankfurters.



FENNEL

Grown in the Mediterranean. Commonly used with fish dishes, bread and soup and salads. Beneficial for the eyes. All plant parts can be used including seeds, stems, leaves and bulbs.



FENUGREEK

Somewhat sweet, somewhat bitter. It is used as a basic ingredient in most curries. Also used to flavour certain cheeses. Grown in the Middle East and Asia.



GARLIC

Salt, minced and powder. The reputation of French and Italian cooking rests largely on the use of garlic seasoning. Use in many meats, soup, spaghetti dishes and sauces.



GINGER

From Jamaica, West Africa, Asia. Whole-for picking, in chutneys, conserves, baked and stewed fruits. Ground - for cakes, gingerbread, fruits, pot roast, polony, frankfurters, salami, pork sausage.



MACE

Fragrant orange-red dried covering around nutmeg seed, with similar flavour. Whole - for pickling, fish, fish sauce, stewed fruit. Ground - delicious in baked foods, pastries, polony, bratwurst, pork sausage, knackwurst.



MARJORAM

Herb of mint family, From France and Chile. Delicious in stews, soups, poultry, fish sauces. Sprinkle on lamb while roasting.



And How To Use Them



MINT FLAKES

The flakes of a sweet aromatic herb with distinct spearmint flavour. Adds colour and taste appeal to ice-cream, fruit salad, custards. Delicious with veal and lamb roasts.



MIXED HERBS

A blend of seven herbs, with a wide variety of uses. Adds zest to most meals, especially stews, roasts, tomato dishes and fish recipes.



MIXED SPICE

A special Crown blend of cinnamon, nutmeg and allspice. Use in cakes, puddings, apple dishes and preserves.



MUSTARD SEED

From California, Montana, Europe and the Orient. Whole - use in making pickles, relishes and chutneys. Ground - to flavour meats, sauces, gravies, mayonnaise, frankfurters, salami, liverwurst.



NUTMEG

Seed of the fruit from East Indies, British West Indies. Whole - grate as needed. Ground - polony, frankfurters, viennas, boerewors, pork sausage, salami.



ONION

Salt, flakes, minced and powder. The humble onion is one of our most versatile seasonings. Use in practically any dish where the distinctive onion flavour is desired.



OREGANO LEAVES

Imported from Italy and Mexico. Good in chilli con-carne, vegetables, meats, stuffings, sauces, gravies and eggs. Important in Italian cookery and pizzas.



PAPRIKA

A mild member of the red pepper family. Adds appetising colour and flavour variety to eggs, cheese dishes, seafoods, potatoes, cauliflower, other vegetables. Lends a colourful touch to salads.



PARSLEY FLAKES

Used as a seasoning and garnish for soups, salads, meats, fish, sauces and vegetables. Distinctive, mild parsley taste adds new flavour to leftovers.



PEPPER BLACK

The universal spice, from the East Indies. Whole - used for home grinders and in pickles, soups, and meats. Ground - adds flavour to most foods, boerewors, mettwurst, salami, pepperoni, pastrami rub.



PEPPER WHITE

White, mild-flavoured centre of pepper berry. Whole or ground. Use same as black pepper, or in dishes where pepper that doesn't show may be preferred.



PEPPER RED

Cayenne, from West Africa, Mexico, South Africa and others. The most pungent of all spices! Use sparingly - adds hot, zesty flavour. For polony, frankfurters, liverwurst and pepperoni.



And How To Use Them



ROSEMARY LEAVES

A delectable herb for flavouring lamb, soups, stews, fish, meat stocks, boiled potatoes. Sprinkle on beef before roasting.



SAGE LEAVES

Favourite flavour for poultry and meat stuffings. Makes pork dishes extra good. Tasty in stews, meat loaf, hamburger, pickles, meatballs.



SAVORY

This herb of the mint family comes from France and Spain and is ground for easy, delightful flavouring of meats, poultry, dressings and sauces. Try a pinch in pastry.



SESAME SEED

Imported from Turkey, India and the Orient. Gives a rich, nutty flavour when sprinkled on breads, biscuits, vegetables and when used in pastries and casserole dishes.



THYME

A herb imported from France and Spain. Stews, soups, meats, eggs and tomato dishes gain tastiness from thyme. Sprinkle on sliced tomatoes for flavour variety, in stuffings, boerewors and liverspreads.



TURMERIC

A root of the ginger family with a bright yellow colour and appetising odour. Used for pickling and in making piccalilli, relishes, mustard and curry dishes.

VARIOUS SPICES





ITEM	DESCRIPTION
Basil	Rubbed
Bay Leaves	Ground
	Whole
Bell Peppers	Mixed 3 mm
	Green 9 x 9 mm
	Red 9 x 9 mm
Birds Eye Chilli	Ground
	Coarse Cut
Caraway	Ground
	Whole
Cassia	Whole
Cayenne Pepper	Ground
Celery Seed	Ground
Chilli	Coarse Cut
Cinnamon	Ground
Cloves	Ground
	Whole
Coriander	Cracked
	Coarse
	Coarse Roasted
	Ground
	Ground Roasted
	Whole
	Whole Roasted
Cumin	Ground
	Whole
Fennel	Ground
Garlic	Flakes 10 - 20 mm
	Granules 8 - 12 mm
	Granules 1 mm
	Powder

ITEM	DESCRIPTION	
Ginger	Ground	
Mace	Ground	
Marjoram	Whole	
Mint	Whole	
Mixed Herbs	Whole	
Mustard	Esr	
	Powder	
	Yellow Seed	
	Yellow Ground	
Nutmeg	Ground	
Onion	Flakes 15 mm	
	Kibbled	
	Powder	
Origanum	Whole	
Paprika	Ground	
Parsley	Whole	
Black Pepper	2MR600	
	Ground	
	Coarse	
	Whole	
White Pepper	Ground	
Pimento Whole	Whole	
Rosemary	Whole	
Sage	Ground	
	Whole	
Thyme	Ground	
	Whole	
Turmeric	Ground	



Glazes



Introduction

Meat glazes add value to all types of meat including beef, chicken, lamb and pork. They improve the eye-appeal of the meat at point of sale and add delicious flavours to the cooked product. Applied to the raw meat, our glazes can be chilled or frozen, adhering for up to a week. Once the meat is cooked the glazes remain intact for the shelf life of the product.

DOSAGE: Sprinkle the glaze on the meat. The glaze absorbs the juice of the meat, causing a sticky glaze to form. The use of all glazes is according to taste.

TOP SELLER

Honey & Pineapple Glaze

This stunning glaze with fruity pineapple and sticky honey is great for pork.

1 kg CODE: 4055775

Honey Flavaglaze

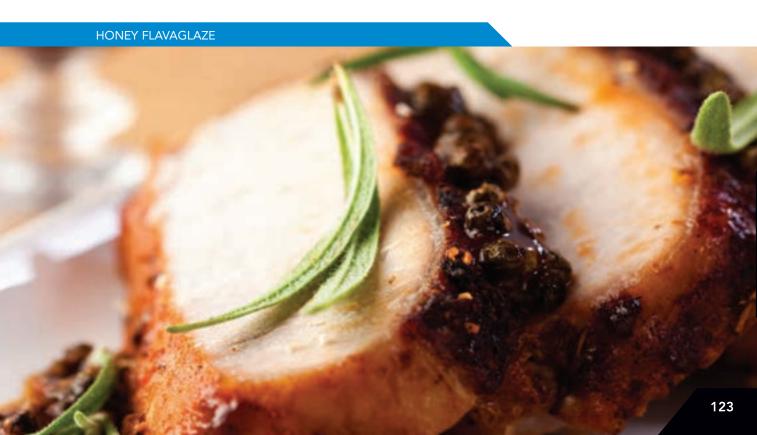
This honey glaze caramelises and adds a lovely glossy appearance to your meat.

1 kg CODE: 4055284

Sosatie Flavaglaze

A savoury alternative to the traditional sweet glaze.

1 kg CODE: 4055179



Food Ingredients

Crumbs

TOP SELLER

Sweet BBQ Crumbs

A great blend of spices mixed to make the perfect BBQ crumb with mouthwatering flavour.

15 kg CODE: 4402721

Hawaiian Crumb

Best represents the flavors of Hawaii; slightly sweet and slightly tangy.

1 kg CODE: 4412246

Golden Crumbs

Use these crumbs to give food a great golden colour with a mild savoury flavour.

10 kg CODE: 4693191

Cajun Crumb

This Cajun crumb has a good source of heat from a variety of chillies and peppers and a load of herbs and spices.

1 kg

CODE: 4412247



Something Munchy® Crumbs





Introduction

Try something new and tasty using the Something Munchy® Schnitzel coatings if you are looking for something different and unique with value for money.

USAGE: Flatten the meat using a mallet or the Schitzelmaster. Dip the meat in all-purpose batter and coat with your favourite Something Munchy® flavoured crumbs.

Pick-up weight achieved is 70 - 80%.

2
ш
4
J
ш
S
Δ
\overline{C}
\sim

Something Munchy® Texan Style

Legendary steak seasoning with a sweet and slightly aromatic flavour; perfect for schnitzels.

2 kg CODE: 4408807

Something Munchy® Six Gun® Grill

The most popular meat flavour at Crown National; great for flavour all types of meats.

2 kg CODE: 4408803

Something Munchy® Red Bell Pepper & Parsley

A delicious Bell Pepper flavour that is both sweet and mild.

2 kg CODE: 4408805

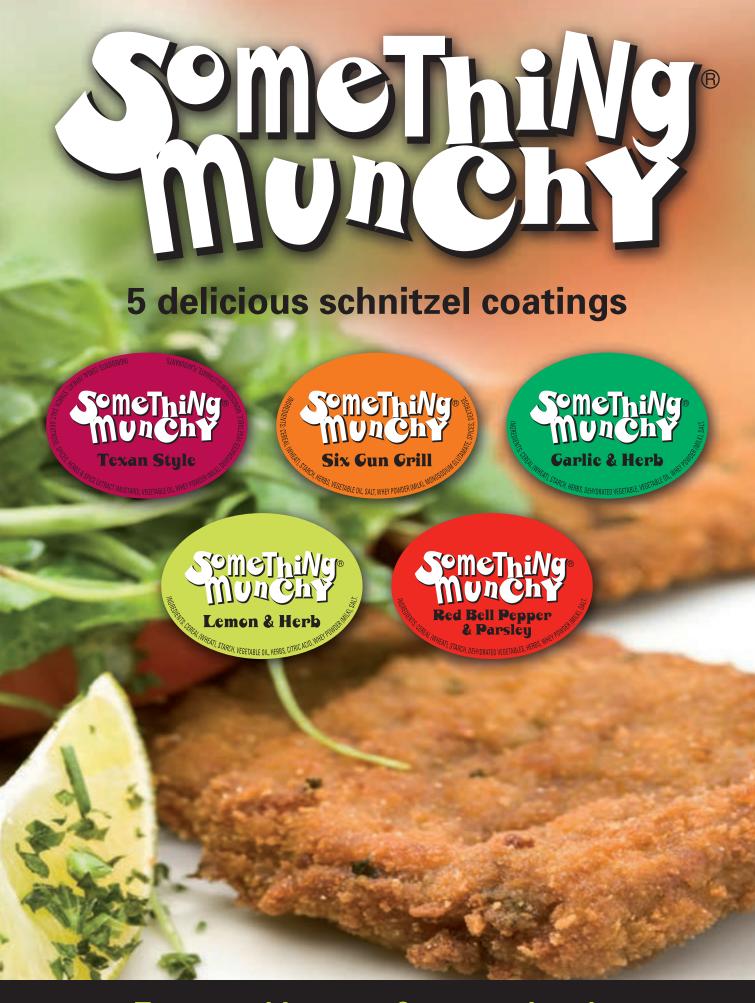
Something Munchy® Lemon & Herb

Zesty lemon flavour infused with herbs. 2 kg CODE: 4408806

Something Munchy® Garlic & Herb

A delicious garlic with a subtle hint of herbs. Ideal for chicken or beef.

2 kg CODE: 4408801



Try something new & tasty using the something munchy schnitzel coatings and the schnitzelmaster!!!

Coatings



Introduction

Crown National has a variety of coatings available. Some extra spicy, others lightly flavoured.

Battercote

Cover cubed pork, calamari, mushrooms, onion rings etc. with Battercote and deep fry. Results in a crispy, puff batter.

PREPARATION: Mix 1 part Battercote with 1.5 parts water.

25 kg CODE: 4085043

Battermix

For use on fish, poultry and meat.

PREPARATION: Mix 1 part Crown Battermix with

2 parts water.

Altry and meat. 25 kg CODE: 4070011

NATIONAL CHICKEN BREADING 127

So Good® Coatings



TOP SELLER

So Good® National Chicken Breading

All purpose breading for chicken with a savoury flavour.

PREPARATION: Cover product in breading and fry in oil.

CODE: 4402132 1 kg

12 kg CODE: 4402131

So Good® American Chicken Breading

Use to crumb poultry portions.

PREPARATION: Cover product in breading and fry in hot oil.

CODE: 4013158 5 kg

So Good® All Purpose Batter

A battermix to use for a variety of applications.

1 kg CODE: 3693454

PREPARATION: Mix 1 part All Purpose Batter with 2 parts water.

So Good® Battermix 'J'

For use on fish, poultry and meat.

10 kg CODE: 4408590

PREPARATION: Mix 1 part Crown Battermix 'J' with 2 parts water.

So Good® Fish Batter

For a crispy, light and tasty batter.

10 kg CODE: 4085263

PREPARATION: Mix 1 part fish batter with 2 parts water.

So Good® Country Breading

A breading with a strong pepper taste!

15 kg CODE: 4430066

PREPARATION: Cover product in breading and fry in oil.

Spicy Red Chicken Breading

The coating with a zing, slightly hot with a chilli bite.

12.5 kg CODE: 4013816

PREPARATION: Cover product in breading and fry in oil.

So Good® Tempura Battermix

Dip cubed meat or vegetable portions in batter and deep fry

for a crisp coating.

CODE: 4085124 5 kg 12.5 kg CODE: 4085248

PREPARATION: Mix 1 part Tempura Battermix with 2 parts water.

So Good® Coating Systems



So Good® Battermix

A light and crispy batter, very popular on fish. 1 kg CODE: 4656374

PREPARATION: Mix 1 part battermix with 2 parts water.

So Good® Heita Breading

All-purpose breading for chicken with a savoury flavour. 4 kg CODE: 3693712

Lower in salt than other breadings.

PREPARATION: Cover product in breading and fry in oil.

So Good® Milkwash

Dip chicken into milkwash prior to coating with breading.

1 kg CODE: 3693748

Will ensure that breading sticks to the chicken during frying.

PREPARATION: Dilute according to required viscosity: 1 part milkwash

with 10 - 20 parts water.

So Good® Shishampama Breading

A breading that will heat up your taste buds! 4 kg CODE: 3693713

PREPARATION: Cover product in breading and fry in oil.

So Good® Shishampama Mild Breading

Mild in heat, full in flavour. 4 kg CODE: 4080002

PREPARATION: Cover product in breading and fry in oil.

So Good® Tempura Battermix

Light and fluffy batter with visuals of herbs. 4 kg CODE: 3693769

PREPARATION: Mix 1 part battermix with 3 parts water.

So Good® Tender & Juicy

A passive brine that tenderises the chicken portions, making it more 4 kg CODE: 3693749

juicy and flavourful, and increases the weight of the meat.

PREPARATION: Mix 1 part Tender & Juicy with 16 parts water.

Marinade chicken pieces overnight or for at least

2 hours.

Food Ingredients

Rubs



Introduction

A rub is a spice and/or herb mixture that is added to foods before cooking. Rubs function by absorbing the meat's own juices. When the rub is applied, the carriers will melt and the spices are carried into the meat by its own natural juices. Crown National's range of rubs are tasty and the perfect seasoning for any meat type.

DOSAGE: The use of all rubs is according to taste.

OP SELLEI

Meister Club® BBQ Rub

Add amazing texture and flavour to your meat. Meister Club® BBQ Rub is perfect for Chicken, Pork, Beef and Lamb.



1 kg CODE: 4427113

Meister Club® Meat Rub

Fine sweet red pepper, coarse green pepper, caraway seed and onion flakes for seasoning any meat type.



1 kg CODE: 4412249

Pastrami Rub

Sprinkle over cured meat before cooking.

1 kg CODE: 4694120

Sweet Oriental Rub

A blend of caraway, garlic, onion, white pepper, salt and paprika. Great on boiled potatoes, but just as good on any meat item.

1 kg CODE: 4070026



INTERESTED IN MAKING SOMETHING THAT'S JUST SO GOOD?



THE SO GOOD EASY-TO-USE RANGE INCLUDES:

Meal mixes, coatings, sprinkles and dessert mixes.

For any occasion - big or small....







So Good® Home Meal Replacements



Introduction

Home meal replacements (HMR) or meal solutions are regarded as major opportunities for sales growth. These fully-or partially-prepared foods appear to solve growing consumer needs: lack of time, lack of skill, and lack of desire to prepare food. They allow consumers the benefit of having a tasty home-cooked meal without having to cook it themselves, offering a healthy alternative to the typical Fast Food restaurants.

All So Good® meals and desserts are packed in sachets, inside a 2.5 kg bucket.

Features, advantages and benefits:

Contain no added MSG and are preservative free (all meals packed in buckets)

Are designed to deliver standardised yields (half bain-marie tray-insert across the range)

Provides consistency to our customers, as no pre-weighing of the spices is required, eliminating the factor of human error

The products are versatile in their application

Our customers save on labour time due to the convenience of using the sachets

The range is accompanied with a very user friendly recipe file

The recipe file contains a CD with:

- a. Costing programme
- b. Recipe ingredient declarations and allergen statement (this info is also available on our website to download)

Simple recipes

Can create signature dishes using a range of sprinkles

Range of desserts on offering

Packaging: stackable and resealable





So Good® Beef Curry Mix

This quick recipe makes a simple and tasty beef curry.



500 g CODE: 3693700

So Good® Beef Stew Mix

A rich, brown stew with aromatic flavours.

Used in: Beef Stew, Meat and Vegetable Stew, Irish Stew; Beef, Prune and Mushroom Stew.

25 x 100 g CODE: 3693761 > NO ADDED MSG & PRESERVATIVE FREE

500 q CODE: 3693707



So Good® Bobotie Mix

For that typical Cape Malay Bobotie. Tastes Great!



500 g CODE: 3693554

So Good® Bolognaise Mix

A savoury meaty flavour to make the traditional Italian meat sauce the proper way.



500 g CODE: 3693556

So Good® Chicken Ala King Mix

A creamy chicken gravy with peppers and mushrooms, best served over hot rice. Delicious!



500 g CODE: 3693565

ALL VISUALS ARE SERVING SUGGESTIONS ONLY





So Good® Chicken Stew Mix

A rich, yellow stew enhanced with aromatic herbs.

Used in: Chicken Stew, Tripe, Samp and Beans.

25 x 100 g CODE: 3693760 > NO ADDED MSG & PRESERVATIVE FREE

500 g CODE: 3693706



So Good® Crown Curry

A mild curry with a predominant fenugreek / fennel note.

USE ACCORDING TO TASTE

1 kg CODE: 4619188



So Good® Curry Medium

A wonderful curry packed with flavour for use with any meat.

USE ACCORDING TO TASTE

1 kg CODE: 4619240



So Good® Chicken Yellow Curry Mix

Mild in flavour and easy to make, you won't believe how good it tastes!

500 g CODE: 3693702



So Good® Cottage Pie Mix

Makes a delicious and quick savoury dish with a mashed potato topping. Fabulous, classic comfort food.

500 g CODE: 4405553



ALL VISUALS ARE SERVING SUGGESTIONS ONLY





So Good® Creamy Mushroom & Sweet Pepper Base

Rich and creamy filled with flavour to compliment your dish. An all-round winner!

Used in: Chicken a la King, Beef Stroganoff, Chicken Lasagne, Alfredo Pasta, Fish Pie and Creamy Chicken & Mushroom Soup.

10 x 250 g CODE: 3693756 > NO ADDED MSG & PRESERVATIVE FREE



So Good® Curry Mix

A subtle blend of hot, salty, sweet and sour flavours to get the taste buds tingling. The perfect curry choice!

500 g CODE: 3693562



ALL VISUALS ARE SERVING SUGGESTIONS ONLY







So Good® Curry Mix KZN

A wonderfully full flavoured blend that gives you a nice tinge of heat!



3 kg CODE: 4405042

So Good® Eggwash

A coating applied to baked goods to give them a glazed look or used to dip chicken pieces in before breading.

Mix 100 g with 1 litre water

1 kg CODE: 4095375



So Good® Italian Tomato Base

The true Italian flavour – a dash of spice, a grate of parmesan – simple, so good!

Used in: Tomato Bredie, Spaghetti Bolognaise, Vegetable Lasagne, Roast Vegetable Pasta, Chilli Con Carne.

25 x 100 q CODE: 3693757 > NO ADDED MSG & PRESERVATIVE FREE



So Good® Lamb Breyani Mix

A pot full of aromatic flavours creating the best traditional Indian Breyani.



500 g CODE: 3693711

So Good® Mash Mix

Creamy texture, delightful taste – all you need to do is add boiling water.

Used in: Mash, Creamy Mash, Fish Cakes.

 $10 \times 250 \text{ g}$ CODE: 3693764) NO ADDED MSG & PRESERVATIVE FREE

500 g CODE: 3693552



ALL VISUALS ARE SERVING SUGGESTIONS ONLY





So Good® Potjiekos Mix

A typical South African delicacy. A scrumptious treat full of bits of goodness. Vegetables aren't even necessary!

Used in: Oxtail Stew, Vegetables Potjie Style, Pasta with Roast Meat, Minestrone Soup.

25 x 100 g CODE: 3693768 > NO ADDED MSG & PRESERVATIVE FREE

500 g CODE: 3693557



So Good® Red Curry Mix

A hotter, Durban-style Indian curry fried with onions for an aromatic, spicy finish!

Used in: Beef Curry, Mutton Curry, Biryani, Thai Curry, Chilli Con Carne.

25 x 100 g CODE: 3693759 > NO ADDED MSG & PRESERVATIVE FREE



So Good® Yellow Curry Mix

A milder, Indian-style curry, flavoured with masala mix.

Used in: Malay Chicken Curry, Mince Curry, Samp and Bean Curry, Bean and Potato Curry, Bobotie.

25 x 100 g CODE: 3693758 > NO ADDED MSG & PRESERVATIVE FREE



So Good® Soup Mix

Tasty and easy to prepare recipe that is full of flavour. Add meat and vegetables for the perfect winter warmer soup or use as a base for a multitude of other recipes.

500 g CODE: 3693560



So Good® Stew Mix

A sensory sensation! A great tasting meal that will warm the winter away – add meat and veggies of your choice.

Used in: Beef, Prune and Mushroom Stew, Oxtail Stew, Meatball Stew with Vegetables, Ox Liver and Cabbage, Meat and Vegetable Soup.

25 x 100 g CODE: 3693765 > NO ADDED MSG & PRESERVATIVE FREE

500 g CODE: 3693558



ALL VISUALS ARE SERVING SUGGESTIONS ONLY

Food Ingredients

So Good® Meal Mixes



So Good® Stew Mix KZN

A hearty stew is a great way to fill up on a cold winter's day, this recipe is great for meat or chicken and is quick and easy to prepare.

500 g CODE: 4405040



So Good® Stroganoff Mix

Tender and creamy - add strips of beef, onions and mushrooms to make up this classic beef stroganoff recipe.

500 g CODE: 3693563



So Good® Tripe Yellow Curry Mix

A mildly spiced yellow curry for a delicious meal that is full of flavour and traditionally South African.

500 g CODE: 3693705



ALL VISUALS ARE SERVING SUGGESTIONS ONLY





EASY STEPS TO BECOME AN 'OH SO GOOD' CHEF

SO GOOD MEAL MIXES



SO GOOD CREAMY MUSHROOM & SWEET PEPPER BASE

Rich and creamy filled with flavour to compliment your dish.

Used in: Chicken a la King, Beef Stroganoff, Chicken Lasagne, Alfredo Pasta, Fish Pie and Creamy Chicken & Mushroom Soup

10 x 250g PRODUCT CODE 3693756

25 x 100g PRODUCT CODE 3693758

25 x 100g PRODUCT CODE 3693760



SO GOOD YELLOW CURRY MIX

A milder, Indian-style curry, flavoured with masala mix.

Used in: Malay Chicken Curry, Mince Curry, Samp and Bean Curry, Bean and Potato Curry, Bobotie.



SO GOOD CHICKEN STEW MIX

A rich, yellow stew enhanced with aromatic herbs.

Used in: Chicken Stew, Tripe, Samp and Beans.



SO GOOD STEW MIX

A sensory sensation! A great tasting meal that will warm the winter away - add meat and veggies of your choice.

Used in: Beef, Prune and Mushroom Stew, Oxfail Stew, Meatball Stew with Vegetables, Ox Liver and Cabbage, Meat and Vegetable Soup.



25 x 100g PRODUCT CODE 3693765

SO GOOD CHEESE SAUCE BASE

Macaroni cheese or any other cheese dish like never before superb flavour, ideal texture. It's as easy as being a gourmet chef.

10 x 250g PRODUCT CODE 3693762

Used in: Potato Bake, Macaroni and Cheese, Cauliflower and Broccoli, Creamed Spinach, Cheese Sauce.



SO GOOD MASH MIX

Creamy texture, delightful taste – all you need to do is add

Used in: Mash, Creamy Mash, Fish Cakes.



SO GOOD ONION GRAVY MIX

A rich, brown gravy with added dried onion and onion flavour.

10 x 250g PRODUCT CODE 3693764

Used in: Beef Stroganoff, Brown Onion Potato Bake, Roast Chicken Pie, Samp and Beans, Cottage Pie, Onion Gravy, Mushroom Gravy, Brown Onion Soup, Minestrone Soup.

25 x 100g PRODUCT CODE 3693767



SO GOOD ITALIAN TOMATO BASE

The true italian flavour - a dash of spice, a grate of parmesan - simple, so good!

Used in: Tomato Bredie, Spaghetti Bolognaise, Vegetable Lasagne, Roast Vegetable Pasta, Chilli Con Carne.



10 x 250g PRODUCT CODE 3693757

SO GOOD RED CURRY MIX A hotter, Durban-style Indian curry fried with onions for an aromatic, spicy finish!

Used in: Beef Curry, Mutton Curry, Biryani, Thai Curry, Chilli Con Carne.



SO GOOD BEEF STEW MIX

A rich, brown stew with aromatic flavours.

Used in: Beef Stew, Meat and Vegetable Stew, Irish Stew; Beef,

25 x 100g PRODUCT CODE 3693759



25 x 100g PRODUCT CODE 3693761

SO GOOD POTJIEKOS MIX A typical South African delicacy. A scrumptious treat full of bits of goodness. Vegetables aren't even necessary!

Used in: Oxtail Stew, Vegetables Potjie Style, Pasta with Roast Meat. Minestrone Soup.



25 x 100a PRODUCT CODE 3693768

SO GOOD WHITE SAUCE BASE A mouth watering white sauce to compliment any vegetable dish.

Used in: Chicken Lasagne, Beef Lasagne, Vegetable Lasagne, Chicken Pasta, Roast Vegetable Pasta, Tuna Bake, Fish Pie,



10 x 250g PRODUCT CODE 3693763

SO GOOD GRAVY MIX

A rich colour, quality brown gravy with sheen and taste. Used in: Chicken Stew, Malay Chicken Curry, Beef Curry, Samp and Bean Curry, Bean and Potato Curry, Savoury Mince, Brown



25 x 100g PRODUCT CODE 3693766















EASY STEPS TO BECOME AN 'OH SO GOOD' CHEE

SO GOOD DESSERTS



SO GOOD STRAWBERRY JELLY POWDER

Rich in colour and full of flavour. This quick setting jelly can be used on its own or in a variety of desserts, e.g. jelly and custard, trifle or as a topping.

Used in: Topping for Cheesecake, Jelly, Trifle.

PRODUCT CODE 3693718

SO GOOD GREENGAGE JELLY POWDER

An old favourite, full of flavour. This quick setting jelly can be used on its own or in a variety of desserts, e.g. jelly and custard, trifle or as a topping.

Used in: Jelly, Trifle

5 x 500g PRODUCT CODE 3693720

SO GOOD CHOCOLATE MOUSSE POWDER

A yummy rich, dark chocolate mousse. This mousse is easy to mix and quick setting. Used in: Peppermint Crisp Mousse, Topdeck Mousse, Chocolate

PRODUCT CODE 3693721



SO GOOD CHEESECAKE POWDER

A delicious, rich, fridge cake. This easy to make cheese cake can be eaten on its own as a mousse or used to make a traditional cheese cake with biscuit base and jelly topping.

Used in: Topdeck Mousse, Cheesecake, Strawberry Cheesecake

PRODUCT CODE 3693716 5 x 500g

SO GOOD CUSTARD POWDER

A delicious, rich instant custard sauce. This sauce can be served on its own, with jelly or used in a trifle.

Used in: Trifle, poured over any dessert

5 x 500g PRODUCT CODE 3693717

SO GOOD SPRINKLES

SO GOOD SPICE-O-MAT

1kg PRODUCT CODE 3693771

SO GOOD CHIP SPICE

1kg PRODUCT CODE 3693751

SO GOOD MIXED HERBS

300g PRODUCT CODE 3693746

SO GOOD BBQ SPICE

1kg PRODUCT CODE 3693750

SO GOOD TURMERIC

700g PRODUCT CODE 3693719

SO GOOD PERI-PERI SPRINKLE

700g PRODUCT CODE 3693723

OH SO GOOD SEASONING

1kg PRODUCT CODE 4402046

SO GOOD ROASTED VEGETABLE SPRINKLE

700g PRODUCT CODE 3693770

SO GOOD SALT & VINEGAR SPRINKLE

1.3kg PRODUCT CODE 3693727

SO GOOD PARSLEY

300g PRODUCT CODE 3693741

SO GOOD CHICKEN SPICE

800g PRODUCT CODE 3693714

SO GOOD PAPRIKA

700g PRODUCT CODE 3693722

SO GOOD CHAKALAKA SPRINKLE

PRODUCT CODE 3693715

SO GOOD COATING SYSTEMS

SO GOOD TENDER & JUICY

1kg PRODUCT CODE 3693749

SO GOOD SHISHAMPAMA BREADING

4kg PRODUCT CODE 3693713

SO GOOD HEITA BREADING

4kg PRODUCT CODE 3693712

SO GOOD TEMPURA BATTERMIX

4kg PRODUCT CODE 3693769

SO GOOD MILKWASH

1kg PRODUCT CODE 3693748

SO GOOD SHISHAMPAMA MILD BREADING

4kg PRODUCT CODE 4080002

SO GOOD BATTERMIX

1 kg PRODUCT CODE 4656374



So Good® Sauces



So Good® Cheese Sauce Base

Macaroni cheese or any other cheese dish like never before - superb flavour, ideal texture. It's easy to be a gourmet chef.

Used in: Potato Bake, Macaroni and Cheese, Cauliflower and Broccoli, Creamed Spinach, Cheese Sauce.

10 x 250 g CODE: 3693762 > NO ADDED MSG & PRESERVATIVE FREE

500 g CODE: 4402607



A rich colour, quality brown gravy with sheen and taste.

Used in: Chicken Stew, Malay Chicken Curry, Beef Curry, Samp and Bean Curry, Bean and Potato Curry, Savoury Mince, Brown Gravy.

CODE: 3693766 > NO ADDED MSG & PRESERVATIVE FREE

CODE: 4408688 1 kg

So Good® Gravy Mix KZN

A rich colour, quality brown gravy with sheen and taste.

Used in: Chicken Stew, Malay Chicken Curry, Beef Curry, Samp and Bean Curry, Bean and Potato Curry, Savoury Mince, Brown Gravy.

500 g CODE: 4405045

So Good® Onion Gravy Mix

A rich, brown gravy with added dried onion and onion

Used in: Beef Stroganoff, Brown Onion Potato Bake, Roast Chicken Pie, Samp and Beans, Cottage Pie, Onion Gravy, Mushroom Gravy, Brown Onion Soup, Minestrone Soup.

25 x 100 g CODE: 3693767 > NO ADDED MSG & PRESERVATIVE FREE

CODE: 3693710 500 g

So Good® White Sauce Base

A mouth watering white sauce to compliment any vegetable dish.

Used in: Chicken Lasagne, Beef Lasagne, Vegetable Lasagne, Chicken Pasta, Roast Vegetable Pasta, Tuna Bake, Fish Pie, White Sauce.

10 x 25 q CODE: 3693763 > NO ADDED MSG & PRESERVATIVE FREE

CODE: 4402605 500 q













ALL VISUALS ARE SERVING SUGGESTIONS ONLY

So Good® Desserts

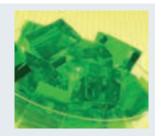


So Good® Greengage Jelly Powder

An old favourite, full of flavour. This quick setting jelly can be used on its own or in a variety of desserts, e.g. jelly and custard, trifle or as a topping.

Used in: Jelly, Trifle.

5 x 500 q CODE: 3693720



So Good® Cheesecake Powder

A delicious, rich fridge cake. This easy to make cheese cake can be eaten on its own as a mousse or used to make a traditional cheese cake with biscuit base and jelly topping.

Used in: Topdeck Mousse, Cheesecake, Strawberry Cheesecake

5 x 500 q CODE: 3693716



So Good® Chocolate Mousse Powder

A yummy rich, dark chocolate mousse. This mousse is easy to mix and quick setting.

Used in: Peppermint Crisp Mousse, Topdeck Mousse, Chocolate Mousse.

5 x 500 g CODE: 3693721



So Good® Custard Powder

A delicious, rich instant custard sauce. This sauce can be served on its own, with jelly or used in a trifle.

Used in: Trifle, poured over any dessert.

5 x 500 g CODE: 3693717



So Good® Strawberry Jelly Powder

Rich in colour and full of flavour. This quick setting jelly can be used on its own or in a variety of desserts, e.g. jelly and custard, trifle or as a topping.

Used in: Topping for Cheesecake, Jelly, Trifle.

5 x 500 g CODE: 3693718



ALL VISUALS ARE SERVING SUGGESTIONS ONLY

Other Home Meal Replacements



Bobotie Mince

For that typical Cape Malay Bobotie, try this Batch Pack flavoured with salt, fennel, fenugreek, garlic, onion and enhanced with meaty notes of Vegamine®. Contains raisins and textured soya protein.

INLCII L	
Minced Beef	6.95 kg
Water	2.00 kg
Vegetable Oil	0.05 kg
Bobotie Mince Batch Pack	1.50 kg

TOTAL 10.50 kg

DECIDE

1.5 kg CODE: 4626284

Bolognaise Gourmet Meals

Typically Italian with oreganum, onion, tomato powder, black pepper. No added MSG.

RECIPE

Minced Meat 6.00 kg Water 2.62 kg 0.38 kg Solae Response® Gourmet Meals Bolognaise Batch Pack 1.00 kg TOTAL 10.00 kg



CODE: 4451013 1 kg

Chilli Con Carne Mince

Taste of Mexico. This fiery seasoning is a blend of chilli, bell peppers and other exotic herbs and spices.

RECIPE

Minced Beef (80:20)6.95 kg 2.00 kg Water Vegetable Oil $0.05 \, \text{kg}$ Chilli Con Carne Mince Batch Pack 1.00 kg **TOTAL** 10.00 kg



CODE: 4695577 1 kg

Country Mince

Added to minced meat to add value through flavour, with the addition of onion, celery, salt, black pepper, tomato powder and flavour enhancers.

RECIPE

6.95 kg Minced Meat Water 2.00 kg Country Mince Batch Pack 1.00 kg Vegetable Oil $0.05 \, \mathrm{kg}$

TOTAL 10.00 kg

CODE: 4465092 1 kg

ALL VISUALS ARE SERVING SUGGESTIONS ONLY

Other Home Meal Replacements



Garam Masala

A quick Garam Masala, using the aromatic blend of spices often found in Indian cooking.

USE ACCORDING TO TASTE

25 kg CODE: 6004593



Savoury Ground Beef

Blend of choice herbs and spices.

	RECIPE				
Minced Beef	(80:20)	7.00 kg			
Water		2.00 kg			
Savoury Ground Beef					
Batch Pack		1.00 kg			

TOTAL 10.00 kg



Savoury Mince

1 kg

A seasoning to flavour mince with oreganum, salt, tomato, onion flakes and preservative to assist the shelflife.

CODE: 3500007

1 kg CODE: 4695631

	RECIPE	
Minced Meat	(80:20)	6.95 kg
Water		2.00 kg
Vegetable Oil		0.05 kg
Savoury Mince	1.00 kg	
TOTAL		10.00 kg



ALL VISUALS ARE SERVING SUGGESTIONS ONLY

GARAM MASALA



Crown National is a supplier of natural hog and sheep casings of superior and consistent quality to customers situated across Sub Saharan Africa.







Index

INTRODUCTION
CHARACTERISTICS
WHY USE A NATURAL SAUSAGE CASING? 147
PRODUCT INFORMATION
NATIONAL DISTRIBUTION PLANT
SEAL OF EXCELLENCE
GOLD CROWN® HOG CASINGS Introduction
GOLD CROWN® SHEEP CASINGS Introduction
FREQUENTLY ASKED QUESTIONS

Natural Sausage Casings



Introduction

Sausage is the oldest form of processed meat. It may even be considered the world's first "convenience food". During the last thousand years sausage-making became a venerable and highly developed craft. In many cases families handed their particular art down through generations and many European nations each had their "wurstmacher" who contributed his own taste and inherited skill to this art, which was influenced by the demand of the marketplace and available ingredients.

The 20th century population explosion led to the mass production of what was historically a family art but, even with the introduction of modern technology, manufacturers still produce a wide variety of speciality sausages with traditional taste and quality being their aim. One element of paramount importance in sausage making is the choice of the casing used. In selecting Crown National's Gold Crown® quality casings, you are guaranteed of using the finest and best selected natural sausage casings available.

Our very modern, fully equipped and state of the art casings quality control and distribution plant situated in Longmeadow-West, Johannesburg conforms to international standards as set by the most modern distribution and casings selection plants around the world.

By having this ultra modern casings plant we are able to exercise strict quality assurance and quality control under stringent hygienic conditions. We are able to guarantee our product specification and are able to recommend, select and supply a particular Gold Crown® casing to meet any customer's specific needs and requirements.

Crown National is justifiably proud to be recognised as a leader in the supply of natural hog and sheep casings of good and consistent quality to customers situated across Sub Saharan Africa and are committed to maintain this status quo into the future.

Crown National is a proud member of the International Natural Sausage Casing Association



GOLD CROWN® NATURAL HOG CASINGS





Characteristics Of A Gold Crown® Natural Casing:

- Only the highest quality and most tender casings qualify to be branded "Gold Crown®".
- Gold Crown® casings are:
 - Hygienically clean and dry-salted
 - Clear and transparent for maximum end product visibility
 - Calibrated strictly as per specification resulting in consistency with minimum variation
 - Free of tears, slits and holes
 - Free of deep-seated veins
 - Selected to have a minimum occurrence of whiskers
 - Stored under controlled atmosphere
 - Correctly refrigerated at our Plant in a controlled atmosphere
 - Guaranteed as per our Seal of Excellence

Why Use A Natural Casing?

Natural casings are the sausage makers' BEST CHOICE because:

- Natural casings readily permit deep smoke penetration.
- Natural casings have excellent characteristics of elasticity and tensile strength, to allow for high efficiency production and expansion during filling.
- Natural casings protect the fine flavour of sausage, without contributing any conflicting flavourings of their own.
- A sausage in a natural casing has that special "snap" and tender bite that man-made products cannot equal and stays tender and juicy.
- A natural casing permits transferral of heat which results in superb cooking even over an open flame.
- Superior tensile strength enables maximum yields.
- Sausage in natural casings has a well-filled appearance.

Seal Of Excellence

The Gold Crown® Seal Of Excellence

Every barrel of Gold Crown® natural casings prominently displays our GOLD CROWN SEAL OF EXCELLENCE® label which is your guarantee that the contents of that barrel have been checked to ensure that they qualify as a superior GOLD CROWN® casing.





EXCELLENT QUALITY













NATURAL SAUSAGE CASINGS

Product Information

Why Use A Natural Casing?

Natural casings are the sausage makers' BEST CHOICE:

- Readily permit deep smoke penetration.
- Excellent characteristics of elasticity and tensile strength.
- · Protects the fine flavour of sausage.
- Has the special "snap" and tender bite.
- Stays tender and juicy.
- · Osmatic quality permits superb cooking.
- · Well-filled appearance.
- · Superior tensile strength.

Characteristics of A Gold Crown Casing:

- Strategic Partnerships to ensure quality and continuity of supply.
- Consistency and stability:
 - Consistent size yields, clean and dry-salted.
 - Transparency allows customers to clearly see the quality of the pack.
 - Free of tears, slits and holes.
 - Free of deep-seated veins.
- Track and trace ability of lots.
- Large range available.
- Customisation available.
- New technology in EEZILOAD.
- Guaranteed as per our Seal of Excellence.

The Product Range:

3 Types:

- 1. Sheep Casings
- 2. Hog Casings
- 3. Beef Casings

Gold Crown Casings supply as follows:

DRY SALTED:

- Guaranteed length of 91.4m
- Available in all calibrations & lengths
- Sold according to international standards
- For small butchery to large producers

TUBED:

Pre-loaded onto a **EEZI** tube resulting in:

- Better yields
- Saves time easy loading
- Better efficiencies
- Less labour
- Improved filling capacities (no waste)
- Increased productivity
- Custom made calibration and to shortest piece i.e. 3m+, 6m+ etc.

Ensure Quality Sausage/Casing:

- Use a quality natural casing: i.e. Gold Crown Casing.
- Having flushed casings, they must always be stored in cold water in a cold environment.
- Hot water favours bacterial growth.
- At no stage during the flushing and preparation stages should hot water be used.
- Insufficient flushing (spooling) will result in salt remaining in the casing tissue.





Contact Details:

Tel: +27(0)11 201 9100 Fax: +27(0)11 201 9175 31 Nguni Drive, Longmeadow West, Modderfontein, 2065 P.O.Box 3864, Edenvale, 1610





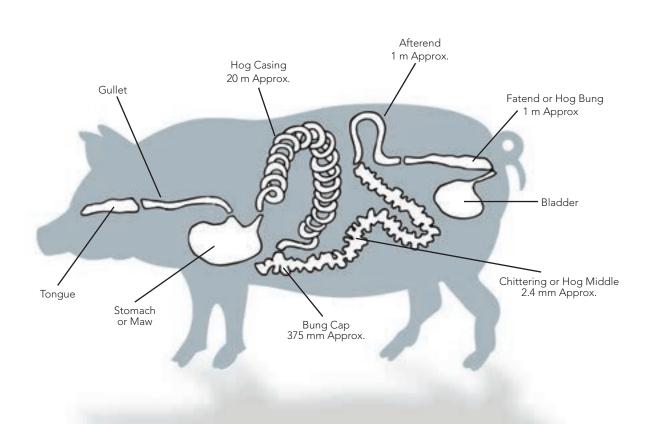
Introduction

The hog casing most used comes from the small intestine which is what we call the "runner". The runner section is coiled like a spring for most of its length which is why sausage and boerewors in a natural casing are always curled. A typical runner could measure 20 metres to 21 metres and varies in diameter between 26 mm to approximately 46 mm.

It is important that casings are cleaned in the correct manner prior to being sold. The casings are first crushed and then passed between a series of rollers and strippers which remove all unwanted layers and material.

There is a general misconception that hair-like projections on a casing, which we refer to as "whiskers" represent inferior casings. All casings have "whiskers" – some of which are more prominent than others, depending on the manner in which the runner was stripped from the carcass. They are of no cause for concern and most of them disappear during the cooking process.

Note: Gold Crown® Hog Casings are also available in a convenient, labour and time-saving pre-tubed Eezi Load, during which process the casings are first flushed, sorted and spooled onto a Eezi Load tube. These casings then only have to be rinsed and applied to the nozzle.





Gold Crown® Specifications For Hog Casings

- Hog Casings are generally used for Fresh Sausage, Cooked Sausage, Pepperoni, Italian Sausage, Large Frankfurters, Russian Sausages to name just some of the more common items.
- Hog Casings are sold in "bundles" or "hanks".
- This unit of measure equals approximately 91 metres (soaked in water).
- Gold Crown® Hog Casings are offered in bundles which we classify as follows:
 - Hog Longs Maximum of 16-18 strands (pieces) per bundle of 91 metres with a range of calibrations from 26 mm to 40 mm
 - Hog Longs Eezi Load Tube Maximum of 10 tubes (shirred casing strands on a Eezi Load tube) per bundle of 91 metres available in all calibrations
 - Hog Value Longs Maximum of 38 strands (pieces) per bundle of 91 metres and calibrated into 28/32 mm, 32/35 mm and 35/38 mm calibrations
 - Hog Medium Longs Maximum of 52 strands (pieces) per bundle of 91 metres and calibrated into 28/32 mm and 32/35 mm calibrations
 - Hog Original Casings No guarantee in terms of calibration and/or number of strands approximately 100 120 metres per bundle

Uses For Hog Casings:

Hog casings are used for coarse emulsion products such as:

- Fresh pork sausage
- Fresh beef sausage
- Boerewors
- Braaiwors
- All types of other species fresh sausage
- Breakfast sausage
- Country style sausage
- Russians
- Frankfurters
- Chorizos
- Ring liver sausage
- Ring French and garlic polony
- Brattwurst





Product Reference and Reorder Code List

RECOMMENDED APPLICATION	PRODUCT REORDER CODE	PRODUCT DESCRIPTION	CAL IN MM	AVERAGE STRANDS P/BUNDLE	AVERAGE STUFFING CAPACITY P/BUNDLE
Beef & Pork Sausages, Boerewors, Brattwurst, Kasegriller, Russians, Smoked & Cooked products etc.	3010660 3010625 3010775 3010770 3010610 3010783 3010608	Gold Crown® Franchise Select Hog X-Long Gold Crown® Franchise Select Hog Long Gold Crown® Super Select Hog X-Long Gold Crown® Super Select Hog Casing Gold Crown® Russian Hog X-Long Gold Crown® Russian Hog Long Gold Crown® Russian Eezi Load	26/28 26/28 28/30 28/30 30/33 30/33 30/33	18 - 20 22 - 24 14 - 16 22 - 24 14 - 16 22 - 24 10 (Tubes)	42 kg 40 kg 48 kg 45 kg 50 kg 48 kg 50 kg
Smoked & Cooked products, Boerewors, Braaiwors. More suitable for factory type applications.	3010260 3010835 3010201	Gold Crown® Imported Hog X-Long Gold Crown® Imported Hog Long Gold Crown® Imported Eezi Load Long	32/35 32/35 32/35	14 - 16 22 - 24 10 (Tubes)	55 kg 52 kg 55 kg
Bulk manufacturing of Fresh & Processed products with effective time & labour saving benefits.	3010864 3010800 3010813	Gold Crown® Factory Eezi Load Long Gold Crown® Factory Hog X-Long Gold Crown® Factory Hog Long	35/38 35/38 35/38	10 (Tubes) 14 - 16 22 - 24	60 kg 62 kg 62 kg
Mainly for all types of Fresh Products. Shorter strands on average. Ideal for supermarkets.	3010918 3010970	Gold Crown® Value Hog Long (2 - 4 m) Gold Crown® Value Hog Long (2 - 4 m)	28/32 32/35	36 - 38 36 - 38	46 kg 48 kg
Suitable for all types of Hand Fillers. Usage: Boerewors, Braaiwors, Beef & Pork sausage.	3010902 3010899	Gold Crown® Hog Medium-long (1 - 3 m) Gold Crown® Hog Medium-long (1 - 3 m)	28/32 32/35	50 - 52 50 - 52	44 kg 46 kg
Economic type Casing for Braaiwors, Chorizo etc. Longer Strand-Lengths on average.	3010940	Gold Crown® Braaiwors Hog Long	40+	14 - 16	70+ kg
Suitable for all types of Hand Fillers. Usage: Mainly Boere- wors & Braaiwors	3010856	Gold Crown® Original Hog	Un- Select	Cup Measure	45 kg



Hog Casing Selection Chart

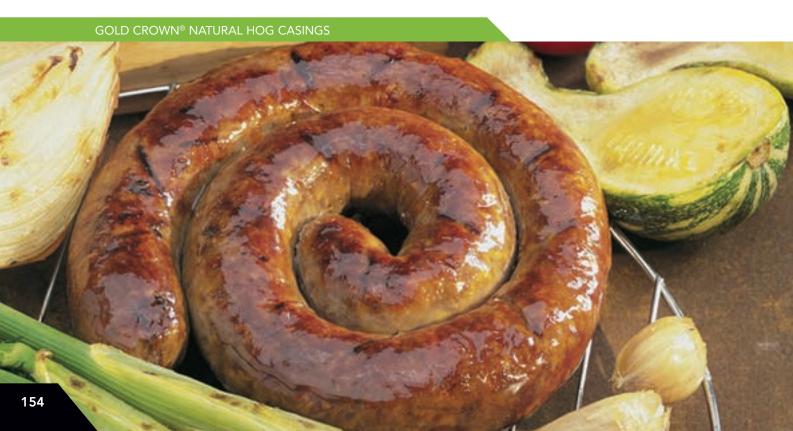




Portion Concept Chart

- When meat was still relatively inexpensive and affordable to all, the concept of portion per packet or weight was of less significance.
- Boerewors, Wors, Beef Sausage, Pork Sausage and any other species of fresh or processed and cooked sausage in our modern age are still in very high demand and a traditionally preferred meal to most South Africans.
- The most important aspect to remember in retail is to always ensure that the portion one offers versus the price per packet one charges, is perceived to be real good value for money. It is a fact that nowadays the shopper assesses two things. Firstly, the number of portions that can be obtained from the pack and whether the customer has the required amount of money in their pocket to pay for the pack. In other words the price per kg is of less importance to the average shopper than we think!
- The narrower the calibration of the casing:
 - The longer the portion per kg.
 - The more favourable the pickup value. Consumers buy price per portion more than price per kilogram.
- Protect your price (Value for Money) and portion (Length per Weight) concept by selecting the ideal calibration of natural casing for your specific market.

NOTE: It is not necessarily economically wise to buy the cheapest casing available. Price per bundle is not always the determining factor.



Gold Crown® Sheep Casings

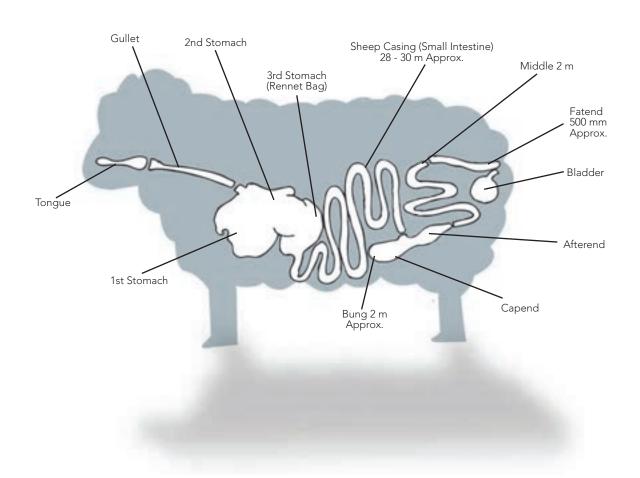


Introduction

Great care is required in handling sheep intestines and their conversion into sausage casings as they are susceptible to damage and are derived only from the small intestines of animals. Sheep casings combine tenderness with sufficient strength to withstand the filling, cooking and smoking operations.

Colour varies according to country of origin; colour ranges from white to gray, but this variation does not indicate quality, strength or capability of smoke penetration, etc. Sheep casings must be clean, free from holes and accurately calibrated. Sheep casing sizes range from 16 mm to 30 mm.

Note: Gold Crown® Sheep Casings are also available in a convenient, labour and time-saving Eezi Load tube, during which process the casings are first flushed, sorted and spooled onto a tube. These casings then only have to be rinsed and applied to the nozzle.



Gold Crown® Sheep Casings



Gold Crown® Specifications For Sheep Casings

- Gold Crown® Sheep Casings of the highest quality are obtained from the small intestine of the sheep and are used in the production of Dry Wors, Cocktail Sausages, a variety of Meat Sticks, Frankfurters, Cheese-Grillers, Knackwurst, Bockwurst etc.
- The narrower calibrations i.e. 18 mm to 22 mm are mostly used for the smaller thinner products such as
 dry wors, cocktail sausages and thin meat sticks whereas the wider calibrations are used for the other products
 mentioned above.
- Sheep Casings are sold in "bundles" or "hanks".
- Bundles of Gold Crown® Natural Sheep Casings measure approximately 91 metres in length (soaked in water).
- Gold Crown® Natural Sheep Casings are offered in bundles classified as follows for ease of reference and reorder:
 - Sheep Longs Maximum of 21 strands (pieces) per bundle of 91 metres
 - Sheep Longs Eezi Load Tube Maximum of 15 tubes (shirred casing strands on a special type of tube) per bundle of 91 metres
 - Sheep Medium Longs Maximum of 50 strands (pieces) per bundle of 91 metres.

Uses For Sheep Casings:

Sheep casings are generally used for products such as:

- Cocktail sausages
- Breakfast sausages
- Thin boerewors
- Viennas
- Frankfurters
- Dry wors
- Cabanossi
- Bier knacker
- Various types of meat sticks
- Kasegriller
- Bockwurst



Gold Crown® Sheep Casings



Product Reference and Reorder Code List

RECOMMENDED APPLICATION	PRODUCT REORDER CODE	PRODUCT DESCRIPTION	CAL IN MM	AVERAGE STRANDS P/BUNDLE	AVERAGE STUFFING CAPACITY P/BUNDLE
Suitable for all types of Coarse Emulsion Products such as Thin Wors, Dry Wors, Meat Sticks etc.	3015795 3015696 3015699	Gold Crown® Selected Sheep Long Gold Crown® Selected Sheep Long Gold Crown® Eezi Load Sheep Long	18 20 20	21 21 12 (Tubes)	16 kg 18 kg 20 kg
Suitable for all types of Coarse Emulsion Products such as Cocktail Sausage, Meat Sticks, Cabanossi etc.	3015545	Gold Crown® Selected "Parys 22" Sheep Long	20/22	21	20 kg
Suitable for bulk type Coarse Emulsion Products such as Thin Wors, Beef Sausage, Dry Wors, Kasegriller etc.	3015714	Gold Crown® Eezi Load Sheep Long	22	12 (Tubes)	22 kg
Suitable for Fresh & Processed Coarse Emulsions e.g. Beef Linked Sausage, Cabanossi, Cheese Griller etc.	3015718 3015720 3015726	Gold Crown® Selected Sheep Long Gold Crown® Eezi Load Sheep Long Gold Crown® Selected Sheep Long	22 24 24	21 12 (Tubes) 21	21 kg 24 kg 23 kg
Mainly Fresh Coarse Emulsion Products e.g. Medium Boerewors, Beef Sausage, Pork Sausage, Country Sausage.	3015734	Gold Crown® Selected Sheep Long	26	21	25 kg
Suitable for Fresh & Processed Coarse Emulsions e.g. Foot-Long Russians, Boerewors, Cheese Griller etc.	3015742	Gold Crown® Selected Sheep Long	28	21	27 kg
All types of Cocktail Sausages, Dry Wors & Meat Sticks.	3015000 3015750	Gold Crown® Sheep Med-long (1 - 3 m) Gold Crown® Sheep Med-long (1 - 3 m)	18/20 20/22	47 - 50 47 - 50	18 kg 20 kg
Beef Sausage, Dry Wors, Mutton Sausage, Meat Sticks etc.	3015769	Gold Crown® Sheep Med-long (1-3 m)	22/24	47 - 50	22 kg
Medium Boerewors, Breakfast Sausage, Pork & Beef Sauage, Kasegriller, Cabanossi etc.	3015777 3015785	Gold Crown® Sheep Med-long (1 - 3 m) Gold Crown® Sheep Med-long (1-3 m)	24/26 26/28	47 - 50 47 - 50	24 kg 26 kg



Product Information

Reasons Why Flushing Of A Natural Casing Is So Important:

It is essential that Crown National customers carefully follow the steps detailed below when preparing the Gold Crown® natural casing prior to filling. Failure to do so invariably ends up in unsatisfactory results which are then blamed on the casing when in fact the cause is ill preparation.

By adhering to the four basic procedures as set out below you will achieve ultimate satisfaction and best results from your Gold Crown® Natural Casing.

SALTED BUNDLES:

- 1. Rinse the casing thoroughly with fresh water to remove superficial salt.
- 2. Soften by soaking in fresh water at room temperature (approximately 21° C) for 45 minutes to one hour. Whilst the bundles are soaking in the water, gently hand-massage them periodically in order to separate the strands and prevent dry spots which may adversely affect the stuffing process. After the 45 minutes to one hour, remove them from the room temperature water and soak them in 30° to 32° C (lukewarm) water for thirty minutes prior to use.
- 3. Pre-flush by introducing water into the casing and allow the water to "run" through. This will ensure that the last remaining bits of salt are flushed out of the casing and will also facilitate getting the casing onto the filling horn (filler-nozzle) and moving the casing smoothly during the filling process.
- 4. To further ensure that all salt is removed from the casings, remove and place into a bucket or mega-tray with lukewarm water which can now be transported to the filling table.

IMPORTANT:

- Insufficient flushing (spooling) will result in salt remaining in the casing tissues. The salt crystals in the casings of raw sausage impede water evaporation which in turn makes stuffing (filling) less successful. It can also result in discolouration, as well as resulting in the end product tasting too salty.
- At no stage during the flushing and preparation stages should hot water be used.
- Hot water favours bacterial growth.
- Flushed casings must always be stored in cold water in a cold environment.

Drying Of Filled Sausages Before Smoking:

SMOKING OF FILLED SAUSAGES:

NOTE: It is vitally important to dry sausages to the point where the casing is tacky.

- If the casing is not sufficiently dried, the smoke will penetrate the casing and will be deposited on the meat surface, thereby permitting the casing to separate from the product inside and causing a pale, dull appearance of the end product.
- If the sausage casing is over-dried, the smoke will be deposited only on the outside surface with very little flavour penetration.



National Distribution Plant

With one of the largest, most sophisticated and ultra modern natural casings plants operated by a distributor anywhere in the world and certainly a first in South Africa, Crown National is able to provide unrivalled benefits to their customers in the form of Gold Crown® natural casings which are quality checked and distributed nationally from these premises.

Crown National regards food safety and hygiene as their major priority and these aspects are no less a priority within the casings plant where our modern state of the art facilities enable us to apply strict quality control and quality assurance procedures utilizing highly trained and qualified staff.

Within the casings plant is a gigantic cold-room, the temperature of which is maintained at a cool enough level so as to prevent any form of bacterial growth on the casings being stored. Maintaining the cold-chain as far as possible is very important and it is thus imperative that clients store their Gold Crown® natural casings on their premises under cold room conditions to ensure maximum shelf-life.

Crown National insists that their overseas casings suppliers carefully select, calibrate and measure according to their specifications. Upon arrival at the Crown National natural casings plant, all natural casings are then checked in the quality assurance department in order to confirm that they comply with the standards specified on their order and only then are the casings classified as Gold Crown® natural casings and awarded the Gold Crown® Seal of Excellence.

The Gold Crown® Seal of Excellence is Crown National's guarantee to their customers that the product is of superior quality and that the contents of the barrel in fact agree with the product description on the barrel. Furthermore the Seal of Excellence gives customers peace of mind in the knowledge that they are dealing with a company of honesty and integrity.



Take a 'VIRTUAL TOUR' through our state-of-the-art casings plant by scanning this QR code on your smart phone or by going to: http://www.youtube.com/watch?v=P3Hj0SmfNns







Frequently Asked Questions...

1. How are sheep casings obtained?

Sheep and goat casings come from the intestine-set of the animal.

Only the small intestines, also called "runners", are used to convert into sausage casings.

A single runner is approximately 28 - 30 meters in length.

2. What does calibration mean?

Calibration is the terminological expression used to refer to the actual water diameter (thickness) of a cleaned strand of a sausage casing. Equal diameters of specific strandlengths are tied together to make up a prespecified overall length of a bundle or a hank of sausage casings.

3. What is a 'bundle" or "hank" of sausage casings?

A bundle or a hank of sausage casings is the industry's collective name for a pre-specified calibration (in diameter), pre-specified minimum strand length and pre-specified overall minimum length per bundle or hank expressed in meters. A Gold Crown® bundle of sheep casings is fully compliant with international standards i.e. the overall length per bundle is a minimum of 91.4 meters or 100 yards.

4. How will I know the correct specification (specific type) of casing to purchase?

- Determine the batch size (volume) of prepared sausage required. Keep in mind that 40 kg wet sausage will yield approximately 25 kg of dry sausage.
- Also determine how often this same volume of dry product must be provided. For example, every third day.
- Calculate the length of time (in days) the 40 kg of wet product will need to reach maturity.
- Since the delivery span is only three days, the diameter (thickness) of the calibration of the ideal casing to be used will be very important.
 - a. Request the narrowest calibration of a sheep casing to ensure the freshly filled dry sausage will reach maturity in the shortest possible time-span 18 mm in this case;
 - b. Determine the approximate stuffing

- capacity (weight) of filled sausage per bundle to calculate the number of bundles required for each batch of 40 kg fresh product. Using an 18 mm diameter sheep casing, one would require approximately three bundles per 40 kg batch.
- An 18 mm sheep casing with an approximate stuffing capacity of 16 kg per bundle would in this case be the recommended sheep casing to use.

5. In what way are natural casings preserved? All natural casings are cleaned, selected and put into bundles. Then they are preserved in dry salt and packed into a barrel. Casing walls are porous so the salt will naturally penetrate the casing to ensure a better preserved bundle.

6. Will the dry salt on the casing influence the flavour profile of the end product?

- The rinsing/soaking/flushing process is extremely important since insufficient attention to these stages of the process will result in salt remaining in the casing tissue. It can result in discolouration, as well as resulting in the end product tasting too salty.
- Always wash the casing thoroughly in fresh water to remove superficial salt.
- After rinsing, it is important to also soak the
 casing in fresh water at room temperature
 (21° C) for between 45 minutes to an hour.
 After the rinsing process soak the bundle/s
 in lukewarm water (about 30° C 32° C) for
 approximately 30 minutes.
- After soaking, pre-flush each strand of the bundle by introducing water into the casingstrand and allow the water to "run" through the strand to ensure all bits of salt particles on the inside of the casing are flushed out.

7. Why does a sheep casing break more easily than a hog casing?

 The elasticity in the wall of a sheep casing is much less than a hog casing. Once it has been filled to capacity it cannot stretch or expand much further the way a hog casing can. The tissue of the outer layer of a sheep casing is very soft and the texture is much thinner than that of a hog casing.



Frequently Asked Questions...

- Check the pressure and speed of the filling machine. It might be too high or too fast leading to over-stuffing. A good hint for controlling the speed and filling pressure is by using a finger-grip at the open end of the stuffing-nozzle (between the forefinger and the thumb)
- The outside surface of the nozzle (also referred to as the stuffing horn) is not smooth. Should there be any cracks, scrapes or knock marks visible on the outside of the nozzle, these would certainly lead to unnecessary breakages of the casing.
- Sausage that bursts on the barbecue is not necessarily due to the type of casing used. This is often because the fire is too hot.
- 8. What is the correct method to calculate the cost of the natural casing being used as part of the total cost of the end-product manufactured?
- Filling or stuffing capacities are measured in kilograms per bundle or hank of 91 meters.
- The value (price) of the bundle including VAT divided by the weight in kg = the net cost per kg of the natural casing. For example;
 R 150.00 ÷ 18 kg = R 8.33/kg = cost of casing.
- The actual cost of the natural casing per kg as above, (the casing-cost-factor) should always be included as part of the total cost calculation of the Meat-Block of the relevant product-batch. (See 'How to cost a Meat Block' in the catalogue.)
- Why do some of the individual casing strands present with light veins or "whiskers" on the surface?
- A whisker on a natural casing is often referred to as "hair" or "longish beard" on the surface
- The whiskers visible are actually the "veins" on the surface of the intestine-runner that attach the intestine to the animal-carcass – they are actually "blood-veins" and part of an animal's biology.
- Veins are not harmful in any way; however, their inclusion in the final presentation of the cleaned casing is perhaps not always acceptable.

10. Why do different bundles of casings have different colours?

- It is quite common to find dry-salted bundles of natural casings in different colours, from snow-white and fluffy to bundles that are more compressed with either a greyish or beige colour while still in dry-bundle format.
- Different countries of origin and the grade of preservation will affect the colour of the casings.
- South Africa's slaughter produces approximately 5% to 8% of the total sheep casings and 3% of the country's hog casings requirements per annum. This is not enough to sustain the high demand, and a massive 95% of South Africa's natural casings' requirements have to be imported from various parts of the world.
- Imported casings are often a slightly different colour because:
 - Different slaughterhouses or abattoirs follow different methods in rolling and cleaning the intestine-runners.
 - b. Depending on the origin of the natural casings in relation to the distance from South Africa, the preserving method will need to withstand any weather condition and refrigeration over any period of time.
 - c. The heavier the preservative is, the darker or greyer the colour of the bundle in its dry format will be. For example, medium or coarse salt only will not be a sufficient preservative for importing purposes certain other preserving chemicals will be added to the salt to ensure a shelf-life without refrigeration of up to 6 months as the casings will have to endure varying climatic conditions for long periods on our open oceans and over very long distances in some cases.
- Remember, the colour has nothing to do with the quality, grade, condition and/or the type of the bundle. Once the bundle has been emersed in water for the rinsing, soaking and pre-flushing stages, it will revert to its original, natural colour.

International Ingredients Principals

Our International Principals are integral to the success of our business. Through our International Principals we have access to world-class technical support and cutting edge ingredient solutions.







International Principals



Index

BK GIULINI	
Introduction Colour Stabilisation Cooked / Cured Meat Products. Cooked Sausages. Range Of Product Combinations Tari Specialities Application Guide Use Of Phosphates In The Food Industry	171 168 169 170 172
CARGILL Cargill Quality Ingredients Cargill Texturising Solutions Cargill Worldwide Presence Our CTS Offerings	187 186
RED ARROW Aqueous Smoke Flavours. Concentrated Brine Soluble Smoke Flavours Dry Smoke Flavours. Grill Flavours. Grill Mark. Oil Based Smoke Flavours Red Arrow Product Line. Natural Browning Agents. Roastin' Flavours Smokez Smoke Condensates. Smoke Brine And Emulsion Flavourings Smoking, Grilling, Browning.	181 182 182 178 181 182 182 183
TARIOCA STARCH	10/



The Segments of Business Line Meat



TARI[®]

CURAFOS®

BEKAPLUS®

BRIFISOL®

FIBRISOL®

TAROMA®

TARIMIX®

- Meat and Poultry
- Seafood
- Convenience Food



Introduction

BK Guilini Chemie GmbH has been in the forefront of phosphate manufacture for more than 40 years. Their current brand names are TARI®, FIBRISOL®, BRIFISOL®, SOLVA®, and JOHA®.









Use of Phosphates in the Food Industry

BK Guilini Chemie uses different polyphosphates (dirophosphates, tripolyphosphates and polyphosphates of longer chain lengths up to highly condensed metaphosphates) as building blocks for different end products. Different polyphosphates are used in a reaction process with high temperatures (250° C - 800° C) to form varying rations of different orthophosphates. The chemical and physical effects and properties of these polyphosphates are very specific. They differ particularly with respect to the pH-value, buffer capacity, sequestering capacity, protein activation, water binding and emulsifying capacity as well as with respect to their solubility in brines to normal STPPs and other single phosphates.

No single defined polyphosphate combines all desired properties. For example, sodium tripolyphosphate (STPP) always has a pH-value of approx. 9.7, which is not optimum, either for chopper phosphates, or for phosphates used in pumping brines. Compare to this a mixture of different polyphosphates where a specific pH-value can be achieved.

With the achievement of the desired pH-value the desired buffer capacity which is responsible for the maintenance of the optimum pH-value of 5.8 - 6.3, which is necessary for the stability of the emulsion of cooked sausages and for the coherence of cooked ham products is achieved. The optimum equestrian capacity or the ability to bind calcium ions and thus leading to the relaxation of the muscle, which is contracted after rigor mortis, is also achieved. Protein activation or solubilisation of muscle protein (actine / myosin) is optimised. All this leads to better water binding and emulsification of the meat products.

It is therefore the "know-how" of BK Guilini as a manufacturer of food additives to achieve an optimum efficiency by combining different polyphosphates, in the respective phosphate product range for specialised use. These include fused, agglomerated, spray-dried, roller-dried and blended combinations of phosphates. These categories have been developed and combined to offer the variations of pH-value and solubilities that are required for different applications.

BK Guilini Chemie has developed specific combinations of phosphates and other food additives for their special needs. We have a wide range of products to suit all their requirements. However, if their requirements exceed the standard, we will develop a product to suit their needs.

The first range of products available is the pure phosphate combinations. These consist of various di- tri- and polyphosphates, which were specially developed for a wide range of applications. In this range you have a selection of products for emulsion type (vienna, frankfurter, polony, russians, etc.) products and injection type (hams, bacon, cooked beef, corned beef, chopped ham etc.) products.

The main products in this range consist of the following:

- TARI K 7
- BRIFISOL 450
- TARI P 22
- TARI P 35

The basic function of TARI K - chopper phosphates and TARI P - curing phosphates is the activation of the muscle protein, the increase in water binding, the stabilisation of the sausage emulsion (improvement of consistency) and the sliceability of cooked cured meats (cooked hams etc.) and thus in general, reduction of cooking losses.



Use of Phosphates in the Food Industry

The Development Of The pH-value After Slaughtering

The use of polyphosphates is closely connected with the biochemical conditions or changes in the meat after the slaughtering process. After slaughtering, the carbohydrate stores of the muscle (glycogen) are degraded to lactic acid. By this the pH-value declines from approx. 6.8 - 7.2 in the living muscle to approx. 5.4 - 5.5 immediately post mortem. At this pH-value, the muscle protein has the lowest solubility and the least water binding capacity. During the maturing process, the pH of the meat increases slightly (due to the beginning of protein decomposition), but never again reaches the initial pH-value of 7 in the living animal and with that optimum water binding.

The Degradation Of Adenosine Tri-phosphate (ATP)

The second even more important change is the degradation of the adenosine tri-phosphate (ATP), which is the naturally occurring phosphate in the living muscle. ATP is, among others, responsible for the contraction and relaxation of the muscle fibres. Immediately after the death of the animal the ATP in the muscle is relatively quickly degraded (broken down); the muscle then remains in the contracted state of rigor mortis. The meat structure remains firm in the so-called "cold meat" state and has the worst imaginable technological properties with respect to the water binding capacity.

The influence on the swelling of muscle protein and water uptake is of prime importance for the cohesion and consistency of cooked sausages and cooked ham products. The basic function of TARI K chopping phosphates and TARI P pumping phosphates consists in the activation of the muscle protein, the increase in water binding, the stabilisation of the sausage emulsion (improvement of consistency), and the cohesion of cooked ham products during slicing and thus in general a reduction in cooking losses. The choice of the right phosphate plays a decisive role in obtaining these goals.

The simultaneous addition of common salt (2 - 3%) and of TARI – phosphates (0.3 - 0.5%) increases the water binding capacity substantially more than an addition of salt alone. The protein, which is bound in the muscle in the form of the actomyosine complex, can only be activated and extracted by the addition of polyphosphates. With polyphosphates, more muscle protein is extracted and made available (compared to the addition of salt alone) and the natural water binding capacity of meat is improved.

TARI phosphates are practically capable of substituting the natural function of ATP by which the slaughtered "cold meat" gets back the processing properties of 'warm meat' (restored water holding capacity of the muscle and increased protein availability).



Cooked/Cured Meat Products

Production Of Cooked Cured Meat Products

The water binding capacity of cooked products is very important, as high losses not only lead to reduction in flavour and nutritive value, but also a considerable economic loss to the manufacturer. Too low cooking temperatures are frequently used to prevent losses. This is a very questionable procedure from a hygienic point of view.

The following advantages are achieved by addition to TARI phosphates to pumping brines:

- Excellent solubility in brine.
- Better distribution of the brine in hams, resulting in the optimisation of the curing process.
- Optimum extraction of the muscle protein.
- Increased water binding capacity, resulting in reduced aw– values, reduced cooking losses, nutrient losses (protein, vitamins, minerals and flavour).
- More efficient use of modern technology for the manufacture of cooked cured meat products (massage and tumbling) with the help of polyphosphates. To achieve the same effect without using polyphosphate, a much larger amount of salt and a too intensive mechanical treatment would be necessary.
- Compensation of different raw material qualities (PSE meat and frozen meat) with application of polyphosphates.
- Improvement of sensorial properties (consistency, colour and succulence).
- Improvement of a more intensive heating process and thus, achievement of bacteriological stability (extended shelf-life).

As far as the type of polyphosphates is concerned, ham phosphates, which are applied via brines, must be very soluble and stable at low temperatures, even in brines with relatively high concentrations of salt. This is where BK Guilini Chemie has achieved a remarkable advantage by developing phosphate combinations to meet these criteria.

The pH-value of the phosphates is an important criteria. Of course, pH-value can lead to a stronger, but unspecific swelling of the muscle fibres. But high alkaline phosphates have considerable disadvantages, e.g. foreign alkaline taste (soapy taste), reducing curing colour development and stability, reduced shelf-life due to the higher pH-value of the final meat product.

TARI phosphates have been developed according to the most modern scientific principals, to achieve optimum efficiency on protein activation, water bindings, emulsifying and buffer capacity, solubility, pH-value etc., for each specific field of application.

To achieve the specific effect of phosphates and to avoid the mentioned disadvantages, the recommended optimum pH-value of a phosphate product for cooked hams is usually between 8.5 - 9.0.



Cooked Sausages

Production Of Cooked Sausages (Meat Emulsion)

When producing meat emulsions in a bowl-chopper, a binding fine mass should be obtained, a homogeneous mix of finely chopped muscle meat, collagen and fat with the addition of water or ice, salt, spices and additives. The amount of soluble protein obtained from the muscle meat is decisive for the emulsion-like distribution and the binding of fat and water in cooked sausages and thus achieving the structure and consistency of the product.

TARI phosphates are capable of extracting larger amounts of fibrillose protein faster out of the meat which coherently coagulates in the sausage mass as a stable protein structure (as the actual binding mass), during the following heat treatment. By this, the firmness and consistency of the finished meat product are positively influenced, the water binding capacity increases, fat and water separation is prevented and the sliceability of the sausage improved.

By adding TARI phosphates, the sausage emulsion can be heated to higher temperatures without losses in quality, which leads at the same time to an extended shelf-life of the product. Polyphosphates are capable of reducing the heat resistance of bacteria. This means that more micro-organisms are killed in a faster and more efficient way at the same cooking time and heating temperatures if polyphosphates are added, compared to phosphate free products.

The same result can be achieved in cooked ham products. Numerous bacteria such as Escherichia coli, Staphylococcus aureas, Streptococcus faecalis, Salmonella as well as Clostridia types which can occur in meat products suffer a remarkable retardation of growth or reduction in heat resistance in the presence of various polyphosphates at an additional rate of 0.2 - 0.5%. This adds to an improvement of shelf-life. With the addition of phosphate the aw – value (the amount of free water) is lowered, by binding the water to the muscle protein and thus this water is no longer available for microbial growth, thus resulting in an extended shelf-life.

COOKED SAUSAGE USING TARI COLPUR 40 S





Range of Product Combinations

Combination Products and Complete Compounds

Apart from the basic products of the TARI product range such as chopping and curing phosphates, colour stabilisers etc., special attention has to be paid to highly efficient TARI combination products with different well-selected functional ingredients.

For emulsion type products the TARIMIX-products contain polyphosphates, colour stabiliser (for speedy colour development and colour intensity), and typical seasonings.

Products in this range are: TARIMIX – Frankfurter, Pariser, Mortadella, Liver Sausage, etc; these products are all for traditional sausages.

Such combination products enable the manufacturer to achieve a high degree of production safety together with simple application technology.

Additional products include the cooked ham products in the form of the TARI Complet range of products. These products contain phosphate combinations, curing agents, colour stabilisers and seasonings. An additional very important aspect is the improvement of yield of up to 100 - 120% extension and the reduction of cooking losses. TARI Complet P is not only a group of single phosphates, but a complete product system for the whole range of cooked cured products.

Products in this range are TARI Complet P 260 for the production of bacon and ham as well as TARI Complet P 60 S for reconstituted hams with high injection / addition rates.

COOKED HAM USING TARI K 3





Colour Stabilisation

Colour Stabilisation Of Cured-cooked and Raw-cured Products

A sufficient curing colour development of meat products depends on the added colour stabilisers. The optimum pH-value for total utilisation of the added nitrite and nitrate in meat products is normally below 5.7. Cooked sausages and cooked hams usually have a pH-value of approx. 5.8 - 6.3 and thus offer no optimum pH-conditions for colour development.

To improve the colour development, a decrease of the pH-value is possible by adding organic acids or Glocono-delta-Lactone (GdL). On the other hand, a sharp drop in the pH-value can be negative for water binding. Alternatively, ascorbic acid, sodium ascorbate or sugars are used which have only a very limited influence on the pH-value and therefore increase the time for sufficient colour development.

The positive effects of colour enhancers and stabilisers are combined in the TARI Colpur range. It is used to obtain an even and fast colour development, resulting in an attractive colour with desired stability together with an optimum utilisation of the added nitrite, which helps to reduce the residual nitrite content in the finished product.





Tari Specialities Application Guide

SUITABLE TARI PRODUCTS	CODE	PACK SIZE		RECOMMENDED QUANTITIES	COMPONENTS
CHOPPING A	DDITIVES				
Tari K 3	5600004	25 kg	Phosphate binder for comminuted meat products and meat emulsions	0.3 - 0.5% to the total mass	Di- and polyphosphates pH approx 7.0
Tari K 7	5600001	25 kg	Phosphate binder for comminuted meat products and meat emulsions	0.3 - 0.5% to the total mass	Di-, tri- and polyphosphates pH approx 8.9
BRINE ADDIT	IVES				
Tari P 22	5600019	25 kg	Brine phosphate for cured and uncured cooked meats, bacon and poultry etc.	0.3 - 0.5% to the final product	Tri-, poly- and diphosphates pH approx 8.9
Tari P 35	5600022	25 kg	Special phosphate combination for uncured poultry, pork and beef	0.3 - 0.5% to the final product	Tri-, di- and polyphosphates pH approx 8.5
Brifisol 450 Super	5600028	25 kg	Brine phosphate for cured and uncured cooked meats, bacon and poultry etc.	0.3 - 0.5% to the final product	Tri-, di- and polyphosphates pH approx 7.5
Tari Complet P 260	5600034	25 kg	Phosphate curing combination with flavour and colour enhancer - contains nitrate	1.0 - 1.2% to the final product	Tri- and diphosphates, sugars, flavourings and spice extracts, colour stabiliser sodium nitrite (2%) on salt as carrier, potassium nitrate
Tari Complet P 60	5600037	25 kg	Complete curing com- pound for higher yield cooked ham products	5.0 - 7.0% to the final product	Starch, sugars, tri-, di- and polyphosphate, whey protein concentrate, thickening agent, colour stabiliser, sodium nitrite (0.4%) on salt as carrier, potassium nitrate
CURAFOS Combi	5600043	25 kg	Phosphate curing combination and colour enhancer	0.8% to the final product	Tri- and diphosphates, sug- ars, colour stabiliser

BK Giulini



Tari Specialities Application Guide

SUITABLE TARI PRODUCTS	CODE	PACK SIZE		RECOMMENDED QUANTITIES	COMPONENTS
COLOUR INT	ENSIFIERS	/ COLO	UR STABILISERS		
TARI Colpur 40 S	5600046	25 kg	Fast colour stabiliser for cooked sausages and other cured commi- nuted meats	0.2% to the final mass	Sugars, colour stabiliser, salt
JABAROT Super	5600049	25 kg	Fast colour stabiliser for cooked sausages and other cured commi- nuted meats	0.1% to the final mass	Sugars, colour stabiliser, GDL
TARI Colpur 50	5600052	25 kg	Colour stabiliser for cooked cured meats, bacon, corned beef etc.	0.2% to the final product	Sugars, colour sta- biliser, salt, flavour enhancer
TARI Colpur HP	5600055	25 kg	Colour intensifier for comminuted meat products and cooked cured meat products	0.02 - 0.05% to the final product	Animal hemoglobine extract
PRODUCTS F	OR SALAM	II TYPE S	SAUSAGES		
TARIS 70	5600058	25 kg	Maturing agent for raw/ dry sausages - quick maturing	0.8 - 1.2% to the total mass	GDL sugars, salt, colour stabiliser, flavour enhancer
SPECIAL PRO	DUCTS FC	R MEAT	AND FISH PROCESSING		
TARI L 96	5600070	25 L	Special product for the treatment of rinds and other collagen mate- rial, for the extension of shelf-life	0.3 - 0.5% for direct addition to rind-emulsions 0.3 - 5.0% in solution for pretreatment of rinds 0.3 - 0.15% as direct addition to meat products	Food acids
TARISOL Fresh	5600076	10 L	Special product for the extension of shelf-life and retention of freshness	0.1 - 0.3% to the final product	Food acids, spice extracts
SWEET- ACURE	5600061	25 kg	Special sugars for meat products	0.3 - 0.8% to the final product	Sugars
PESCA- PLUS 10	N.A.	25 kg	Special phosphate for the processing of fish and other seafood	0.3 - 0.8% to the final product	Tri- and diphos- phates

BK Giulini



Tari Specialities Application Guide

SUITABLE TARI PRODUCTS	SPICE COMBINATION PRODUCTS	RECOMMENDED QUANTITIES	COMPONENTS
TARIMIX	Combination products with typical seasonings	1.0 - 1.2%	Natural spices and functional components
	Frankfurter Knackwurst Cooked Salami Bratwurst Liversausage Mortadella Pariser Strasbourg Aufscnhitt Tarinette Garlic Sausage Jagdwurst Vienna		
	S-Optimo	1.4 - 1.6% to the total mass	
	Rohpokel	0.5 - 0.7% to the total mass	
TARISPICE	Special Spice Blends	0.4 - 0.5% to the final product	Natural spices and spice extracts
	Aufschnitt Deluxe Salami Classico Westfallan Salami Vienna Special Pepperoni Pepperami Barbecue Russian Poloni Salami		
FIBRISOL (Dry Marinades)	Dry marinades with typical seasonings	6.0 - 7.0% to the final product	Sugars, spices, milkprotein, salt, emulsifier, spice extracts, thickening agents, flavour enhancer
	Sahnegeschnetzeltes Knoblauch-Pfanne Pusta-Pfanne Gyros-Pfanne Geffuge-Pfanne Jager-Pfanne		

Please Note: For further products please refer to the comprehensive TARIMIX / TARISPICE programme.



Red Arrow...
a world of difference

REDARROW

Smoke • Grill • Browning



Smoking, Grilling, Browning

Experience The World's Finest

Smoking techniques, which have been in existence for centuries, were first used as methods of preserving meats. The art of smoking meat has evolved into a unique food processing technology, especially at Red Arrow. Our company's roots date back to 1955, when Dr. Clifford Hollenbeck had a technological breakthrough in smoke flavour processing. He patented this new process, creating the foundation for the Red Arrow company.

Red Arrow was built on this great concept of research, and through the years we have refined our natural smoke flavours and developed innovative ways to utilise them in the industry. Red Arrow continues to carry on the tradition of developing new technology for the manufacturing and application of smoke flavours that was started by Dr. Hollenbeck.

Our Success Is Measured By Your Success

Deeply rooted in the culture at Red Arrow is a belief that our success can only be measured by our customers' success. Red Arrow is dedicated to offering you:

- Superior products.
- Superior customer service.
- Technical assistance.
- Educational workshops.
- Strong partnerships to help you grow and prosper.

We work closely with you to determine what your needs are and the best ways to meet those needs. This includes the latest information and recommendations on:

- New product development.
- Flavour analysis.
- Processing guidelines.
- Application techniques.
- Equipment systems.

This high level of service allows us to address the needs of meat and food processors worldwide.





Smoking, Grilling, Browning

Red Arrow Products: Smoke, Grill and Browning

Smoke:

When it comes to natural smoke flavour and colour, Red Arrow has the world's best products for a variety of applications. Red Arrow's smoke flavours provide refined, savoury natural smoke flavours produced from a wide variety of natural wood sawdust. The visual appeal of smoked food products is enhanced by natural smoke colour. Available in aqueous, dry, oil-based and brine soluble versions, Red Arrow's smoke flavours and colours provide flexibility for a wide variety of manufacturing processes.

Grill:

For a distinct grill flavour profile, Red Arrow offers a complete line of GRILLIN'® flavours, available in dry, water soluble and oil-based forms. Red Arrow's grill flavours offer the following advantages to your culinary creations:

- Concentrated cost-effective products.
- "New" meaty Chef's Grill Flavours.
- Refined grill flavour profiles, eliminating the petroleum or lighter fluid notes.
- "New" off-the-grill flavours.
- GMO-free grill flavours derived from sunflower oil.

Browning:

Red Arrow's browning agents are innovative products that enhance the visual appeal of foods by providing brown colour without affecting flavour. Heat serves as a catalyst to this reaction. Browning agents are available in liquid and dry forms from either traditional or GMO-free identity-preserved raw materials that do not contain maize or soybean. They provide oven-baked, golden-brown colour when reacted with the protein of food products. They are versatile products that can be utilised in most heat processes, including microwave applications. Red Arrow browning agents can shorten cooking times, increase product throughput and enhance cooking yields.

Specialty Products and Flavours: Red Arrow's TOASTIN'™ and ROASTIN'™ products are unique specialty flavours for a variety of applications.

Offering A Complete Line Of Application Equipment

As a leader in smoking technology, we are the only manufacturer in the industry that has developed a complete line of liquid smoke application equipment. We offer a variety of equipment that blends the art of smoking with scientific procedures. Whether atomising or showering with liquid smoke, our systems are designed to best meet your processing needs. Red Arrow will also custom design application systems for specific processing lines.

We Make A Pledge To The Environment

At Red Arrow, we realise the importance of keeping plant operations in harmony with the environment. That is why we commit ourselves to being environmentally friendly in the way we manufacture our products and in the way they are used. As part of our manufacturing process, we use state-of-the-art technology to ensure our factory exceeds strict U.S. environmental laws.

Experience the world's finest.



Grill Mark

Grill MarkTM - 2000 Applicator

We Make Your Grill Marks A Reality...

Continuous Grill Marker Applicator for Fully Cooked Products:

- Yield savings over conventional equipment.
- Obtain higher product quality through precise and uniform coating.
- Minimal contact of application equipment to meat or food surface great for fragile food items.
- Increase conveyor speed compared to traditional grill marking systems.
- Efficient application of Red Arrow liquids.
- Low maintenance cost.
- Simplify production line set-up time.
- Chemical clean-up cost savings.
- Grill marks on non-cooked items.









Drencher





Grill Mark

New technology developed at Red Arrow Equipment to apply liquid products to the surface of restructured foods in order to make a visible grill mark on the product without using a heat source for application. This is a minimal contact type grill marker where the unit contacts the product surface only for a short duration before the cooking process.

The Continious Grill Marker unit is comprised of two sub-units, a spring assembly and also a nozzle assembly. This process requires minimal product contact and forms a straight line grill mark. Our process minimises liquid usage according to the customers line speed, optimising our product usage.

Benefits of the Continuous Grill Mark Machine:

- Minimal contact makes contact with the product surface only for a very short period of time to minimise changes on product surface.
- Low operating cost no heat energy required during machine operations which dramatically reduces operating costs.
- Product flexible the grill mark can be applied to most food products.
- Automated control The control panel provides easy to use and fully programmable controls which can be electronically tied to other operating units for a fully automated grill mark application process.
- Contact at room temperature makes contact with the product at any room temperature and prevents localised burnt spots on product surface and minimised surface distortions.
- Flexible location the location of the assembly can be easily adjusted according to the position and orientation of the customer's line requirements.
- Consistent and repeatable the process provides a reliable and consistent grill mark pattern.
- Adaptable to existing customer production lines.
- Alternative to heat applied grill mark applicators.
- Cost effective uses minimal Red Arrow Liquid products to apply a value added appearance with minimal costs per kilogram to the user.
- Low maintenance costs our process utilises minimal moving parts which reduces maintenance costs and provides for easy clean-ups.
- Customised taste profiles our process can be tailored to each customer's application and various flavour profiles can be applied with the many liquid products that Red Arrow produces.



Red Arrow Product Line

Red Arrow is proud to present its completely GMO-free product line:

Natural Smoke Flavours

Our natural smoke flavours, made from wood sawdust, are available in hickory, mixed hardwood or mesquite. They are available in four different forms:

- Aqueous
- Oil-Based
- Brine Soluble
- Dry

Natural Browning Agents

- Manufactured from traditional raw materials.
- · Creates a golden brown cooked food colour quicker and more efficiently than traditional processing.

Natural Grill Flavours

Our grill flavours are available in dry, liquid and concentrated form for greater flexibility in formulating.

- Manufactured from traditional vegetable oils.
- Excellent variety of chargrill, gas grill and meaty grill flavours.





Aqueous Smoke Flavours

Standard SmokEz Series

The standard line of SmokEz smoke flavours is produced from conventional technology. It has a robust smoke flavour and provides excellent smoke colour.

SmokEz Enviro Series

The SmokEz Enviro line of smoke flavours is produced from advanced technology. It provides a mild flavour and the highest level of browning. It is the most refined group of smoke flavours produced by Red Arrow.

Products for Atomisation

- SmokEz Supreme C
- SmokEz Enviro 24
- SmokEz Enviro 24 T-2
- SmokEz Classic 1027
- SmokEz Applewood 2502
- SmokEz Cherrywood 2514
- SmokEz LFB Supreme

Products for Showering

- SmokEz Poly C-10
- SmokEz Poly C-12
- SmokEz Supreme Poly C
- SmokEz Enviro 24P
- SmokEz Enviro 24PA
- SmokEz Enviro 24PB
- SmokEz Enviro Gold-N-Brown 4.0
- SmokEz Enviro N52
- SmokEz Black Smoke

Products for Internal Addition

- SmokEz C-6
- SmokEz C-10
- SmokEz BN-9
- SmokEz M-10
- SmokEz ST-50
- SmokEz ST-25

Oil Based Smoke Flavours

SmokEz oils are produced by combining natural smoke flavours and various GMO-free vegetable oils. Red Arrow smoke flavoured oils are available in two options: SmokEz oil manufactured from soybean or identity-preserved sunflower oil.

Soybean Oil

- SmokEz Oil H
- SmokEz Oil H DP
- SmokEz Oil M
- SmokEz Oil B

Identity Preserved Sunflower Oil

- SmokEz Oil H SF
- SmokEz Oil H DP SF
- SmokEz Oil M SF
- SmokEz Oil B SF

Concentrated Brine Soluble Smoke Flavours

These concentrated smoke flavours are specifically designed for brine applications and are available in a variety of flavour profiles. They also have excellent antioxidant properties.

- Aro-Smoke P-50
- Aro-Smoke 8056
- Aro-Smoke 8068
- Solu-Smoke Special H
- Solu-Smoke Special M
- SmokEz LFBN
- SmokEz PN-9



Dry Smoke Flavours

Our natural dry smoke flavours are GMO-free and produced from a variety of traditional and identity-preserved raw materials that do not contain maize or soybean. They are available in a wide range of flavour profiles.

Traditional Raw Materials

- CharDex H
- CharDex M
- CharDex 7039
- CharDex 9065

Manufactured From Raw Materials That Do Not Contain Maize or Soybean

- CharDex H GF
- CharTor H
- CharZyme H

- CharDex M GF
- CharTor M
- CharZyme M

Roastin' Flavours

Red Arrow's newest and most exciting product line consists of natural roast meat flavours. Red Arrow offers a number of specialty flavours for a variety of unique applications.

- Roastin' 9073 (deep fried poultry)
- Roastin' 1013 (meaty, slow cooked poultry)
- Roastin' 2002 (slow roasted turkey)

- Roastin' 3123 (oven roasted pork)
- Roastin' 3124 (fire roasted pork)

Grill Flavours

Grillin' flavours from Red Arrow add 100% grill taste to food and meat products. These GMO-free grill flavours are available in dry and liquid forms and are produced from either traditional or identity-preserved raw materials that do not contain maize or soybean.

Traditional

- Grillin' CN
- Grillin' WS-50
- Grillin' CB-100
- Grillin' CB-200
- Grillin' SB Oil
- Grillin' SC Oil
- Grillin' GB
- Grillin' GCGrillin' SD-10
- Grillin' SD-20

- Manufactured From Raw Materials That Do Not Contain Maize or Soybean
- Grillin' CB-100 SF
- Grillin' CB-200 SF
- Grillin' SD-10 GF

Off the Grill Flavours

- Grillin' 2055 (charcoal grill)
- Grillin' 2056 (gas grill)
- Grillin' 2057 (flame broiled)

Chef's Grill

- Grillin' 3103 (charbroiled grill chicken)
- Grillin' 3104 (grilled pork)
- Grillin' 3105 (smoky bacon)

Natural Browning Agents

Natural brown roasted colour can be achieved when our GMO-free browning agents are applied to a food surface and reacted with heat during a normal cooking process (including in the microwave). The agents are manufactured from either traditional or identity-preserved raw materials that do not contain maize or soybean.

Traditional

- SmokEz MB-12
- SmokEz MB-12 Dry

Manufactured From Raw Materials That Do Not Contain Maize or Soybean

- SmokEz Enviro Gold-N-Brown 4.0
- SmokEz MB-12 Dry GF
- SmokEz MB-12 GF



Smokez Smoke Condensates

Smokez natural liquid smoke condensates impart both smoke flavour and colour. Recommended use: drenching or atomisation for smoking of meat products, fish or poultry.

Red Arrow Smokez Liquid Smoke Dip

5 kg CODE: 5457076 25 kg CODE: 5457068

Red Arrow Smoke DR Special Plus

227 kg Drum CODE: 5457107

Red Arrow Smokez C10

1 kg CODE: 4408660

Smokez Brine and Emulsion Flavourings

Smokez Brine Soluble Smoke contains predominantly the oil soluble smoke flavours of natural wood which imparts a very mellow smoke note. Recommended use in brines and pickle solutions. Can also be used in canned fish, snack foods, meat analogues and sauces.

Red Arrow Smokez BN 9

5 kg CODE: 5457106

Heller Seas 'n Smoke

1 litre CODE: 4402221 5 litre CODE: 4402220

Tapioca Starch



Tapioca Starch

Pure Starch

Native tapioca starch is a series of unmodified tapioca starches. Native tapioca starch is extracted from Vietnamese cassava roots. This makes it possible to produce an untreated starch with a high degree of purity – physically, chemically as well as micro biologically.

Application Possibilities

In both the food and non-food industries, tapioca starch is used as a water binder, texturising agent, stabiliser, filler, etc. The food industry uses tapioca starch in products like fruit fillings, noodles, sauces, processed meat products and extruded products, to name just a few.

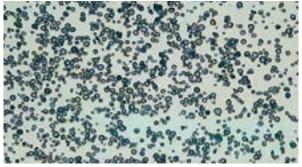
Tapioca Starch Characteristics

Tapioca starch gives you a high viscosity paste that is very transparent. Depending on the concentration you use, you will get either a gel or a paste after cooling. Tapioca starch has superior flavour release compared to other starches.

Tapioca starch has been modified to have cold water thickening properties. These starches are able to bind water without heat, resulting in a high viscous and adhesive solution.

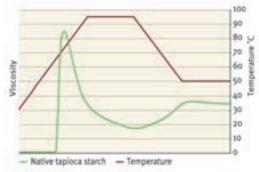
Tapioca Starch 25 kg CODE: 5410008

Tapioca Starch Granules



Microscopic picture of native tapioca starch granules, showing the small granules before gelatinisation.

Viscosity Profile



Typical viscocity profile for native tapioca starch showing the gelatinisation temperature, peak viscosity and breakdown of viscocity during holding



") Key to type abbreviations: C/U: Cook-up, CWS: Cold Water Swelling.



Cargill Texturizing Solutions. THOUGHTS FOR FOOD.



Cargill



Cargill Worldwide Presence

Cargill Texturising Solutions is a leading worldwide producer of hydrocolloids, emulsifiers, lecithins, cultures and enzymes, starches, soy proteins and functional systems.

We are a key building block of Cargill's food ingredients business and a recognised, long-term partner to the food and beverage industries worldwide. Our 39 sales offices and collaboration with more than 100 distributors cover the American, European, Middle East, Asia Pacific and African markets. Our more than 3,000 employees ensure that our unique and highly diverse portfolio of ingredients meets our customers' specifications. Over 300 scientists and applications experts develop cutting-edge food concepts based on our product portfolio to enable you to innovate successfully in your markets. Our global network of application centers and pilot plants ensures we can demonstrate fast and efficient processing solutions near you, matching your precise needs, in near full-scale industrial conditions. And we can call on all the resources of our parent organisation to solve specific problems – from food regulations to energy source choices.

Our CTS Offerings

Cultures

- Direct vat cultures (mesophilic & thermophilic)
- Bulk culture systems (mesophilic & thermophilic)
- Biogarde[™] / Bioghurt[™] cultures
- Dairy surface and ripening cultures
- Meat surface and ripening cultures
- Bioprotective cultures

Functional Systems

Hydrocolloids

- Alginates
- Biopolymers
- Carrageenans
- Galactomannans
- Pectins

Lecithins

- Fluid lecithins
- Tailored fluid lecithins
- De-oiled lecithins
- Selected / fractionated de-oiled lecithins

Soy Proteins

- Full-fat soy flours
- Defatted soy flours
- Textured soy flours
- Flavoured textured soy flours

Starches

- Native starches
- Cold swelling starches
- Emulsifying starches
- Roll-dried starches
- Stabilised starches
- Thinned starches
- Specialty starches
- Maltodextrins
- Spray-dried glucose

Cargill



Cargill Texturising Solutions

Thinking allowed

Thinking about healthier, "better-for-you" products? Visualising a salad dressing with more cling? Imagining smoother fat-free yogurts? Contemplating how to cut costs? Wanting to keep your products fresher for longer?

Cargill Texturising Solutions has the answers.

Changing formulations can impact the mouthfeel and body of your products. Ensuring continued customer appeal requires the most advanced and innovative texturising systems. You also need ingredients to help you address consumer trends, cut costs, accelerate new product development and compete in the global marketplace.

Our texturising experts can advise you on the latest developments in food and beverage science, changes in consumption patterns and the demands of new regulations and legislation that can vary from market to market.

And, we'll help you anticipate future trends so you're ahead of the game in terms of where you want to play with the support you'll need to build a sustainable business.

Think aloud with Cargill Texturising Solutions.

We'll help you develop new products that consumers will think about, too.



Cargill



Quality Ingredients

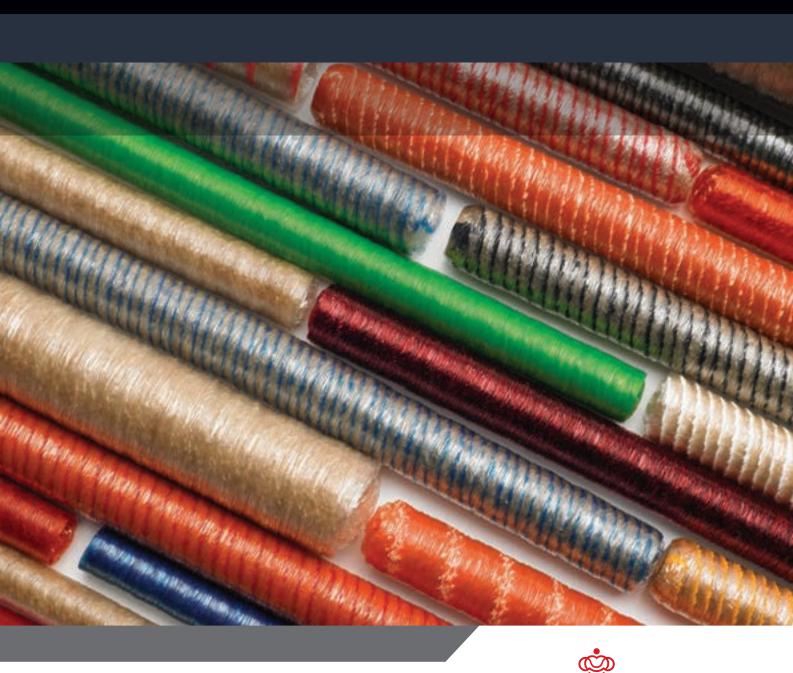
Our ingredients are based on nature, produced from carefully selected renewable resources such as seaweeds, apple pomace, citrus peel and seeds. Our products comply with international food standards and we ensure full traceability for non-GMO ingredients. We can supply raw materials to meet Halal and Kosher demands as well as certification to meet organic labelling requirements.

State-of-the-art production facilities guarantee exact reproducibility of our products and their components, using the latest extraction, fermentation, separation and drying technologies. Our product quality, customer support and innovative technology can play a key role in boosting your food business. Our research scientists combine experience and creativity to target your precise texturising and emulsifying needs and pioneer innovative new approaches providing tomorrow's answers today.

OFFERS AT A GLANCE								
	STARCHES	ARCHES SOY LECITHINS CULTURES HYDROCOL-LOIDS*						
Dairy	•	•	•	•	•	•		
Ice Cream	•	•	•		•	•		
Bakery	•	•	•		•	•		
Meat	•	•	•	•	•	•		
Convenience	•	•	•	•	•	•		
Beverages	•	•		•	•	•		
Fruit	•				•	•		
Confectionery	•	•	•		•	•		
Feed	•	•	•	•	•			
Pharma	•	•	•	•	•	•		
Personal Care	•	•	•		•	•		
Industrial	•	•	•		•	•		
Home Care	•	•	•		•	•		

 $(\hbox{\ensuremath{}^{*}}) \ alginates, \ carrageen ans, \ guar \ gums, \ locust \ bean \ gums, \ pectins, \ xanthan \ gums \ and \ scleroglucans.$

High quality cellulose and collagen casings that are attractive and easy to use.







Index

VISCOFAN CELLULOSE CASINGS	
Introduction	
Advantages	200
Calibration Information	201
Product Range	199
Stuffing Information	202
NATURIN COLLAGEN CASINGS	
Introduction	203
Advantages	205
Calibration Information	206
Collagen Casings for Fresh Sausages	207
Collagen Casings for Processed Sausages and Dry Wors	207
Product Range	204
Stuffing Information	206
HOW TO READ A LABEL	
Traceability	208
THE MANUFACTURING PROCESS	209
FREQUENTLY ASKED QUESTIONS	210

Viscofan Cellulose Casings



Introduction

The Viscofan group is the world leader in artificial casings for meat products which it distributes in over 120 countries worldwide. It is the only manufacturer in the world using technology for all categories of casing products: cellulose, collagen, fibrous and plastic.

To produce a top quality cellulose casing, it is extremely important to use first class raw materials. Cellulose casings are made from natural cellulose. Viscofan uses high quality linters to produce the viscose that will be extruded into casings. They are used primarily in the manufacture of industrially cooked sausages (frankfurters, vienna sausages, hot dogs etc.). Using a complex manufacturing process, the cellulose molecules are chemically and mechanically depolymerised and subsequently repolymerised in cylindrical or tubular form according to the customer's requirements.

The Viscofan Cellulose casings are usually removed during the sausages manufacturing process. Once stripped of their skin, the sausages are canned or vacuum sealed in plastic films to protect them from the influence of oxygen and water vapour.





Viscofan Cellulose Casings



Viscofan small calibre cellulose casings combine high elasticity with an extremely consistent calibre. They are permeable to flavours and colours as intended during the smoking process, but are impermeable to other unwanted aromas. With their excellent peelability, trouble-free industrial processing is guaranteed.

Product Range

FAST PEEL QUALITY:

For smoked and unsmoked processed sausages and also dry-cured sausages, for use on high speed peelers.

Calibres

FAST PEEL:

12EUR / 13USA - 42EUR / 44USA.

Colours

TRANSFERABLE:

Red and orange.

NON-TRANSFERABLE:

Light smoke, blue, red, orange and salmon red.

Stripes

FAST PEEL:

Black, blue, white and red.

Casings are available with 3 or 4 stripes according to diameter.

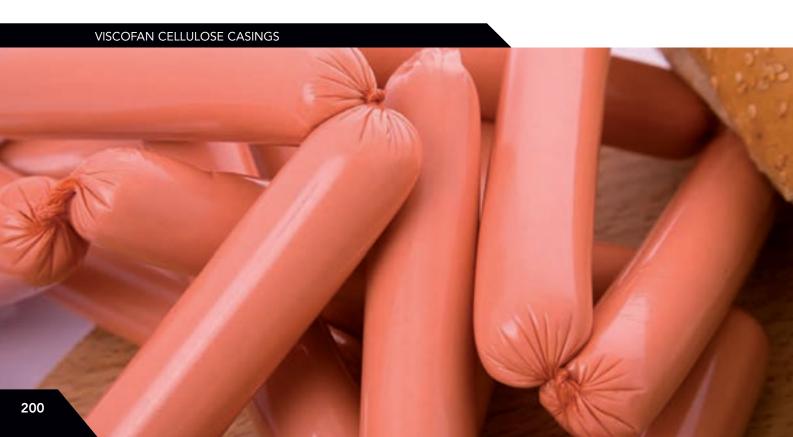
Processing

- Fill directly in the direction indicated without prior soaking.
- Keep to the recommended stuffing diameter.
- The cooking temperature should not exceed 80° C.
- All standard smoking, maturing and cooking systems can be used.

Viscofan Cellulose Casings



ADVANTAGE	DESCRIPTION
Appearance	Sausages in our cellulose casings are perfectly uniform and give your products an appetisingly natural look.
Calibre Consistency	Outstanding calibre consistency creates identical sausages.
Colours	Cellulose casings from Viscofan are available in a wide range of colour tones. You can choose between colours which are transferred onto the product and those which are not.
Product Range	Cellulose casings from Viscofan are available in standard and fast peel quality. These are also available in numerous colours and standard prints.
Productivity	Cellulose casings guarantee efficient processing and a trouble-free production process.
Profitability	The excellent peelability of our cellulose casings guarantees a trouble-free production process and ensures the highest level of productivity.
Ready to Stuff	Our cellulose casings are ready to stuff and can therefore be filled straight out of the packaging without prior soaking.
Retail Packaging	Since individual sausages made with our cellulose casings will be uniform in size they are perfect for pre-packed retail units.
Smoking	Your product will show excellent results when smoked. A perfectly balanced transfer of smoke will give your product the perfect look.
Striped Casings	A solution for distinguishing between products on the production floor.



Viscofan Cellulose Casings



In the following table you will find all the details concerning the packaging of cartons and caddies according to the different sizes and lengths.

FEET (M) PER STICK	EUR CALIBRA- TIONS	USA CALIBRA- TIONS	CADDIES PER CARTON	STICKS PER CARTON	METRES PER CARTON	STICKS PER CADDY	METRES PER CADDY
55' (16,80)	12 - 24	13 - 26	8	400	6720	50	840.00
55' (16,80)	25 - 34	27 - 36	6	300	5040	50	840.00
55' (16,80)	36 - 40	38 - 42	6	192	3220	32	536.67
70' (21,35)	12 - 24	13 - 26	8	400	8540	50	1067.5
70' (21,35)	25 - 34	27 - 36	6	300	6400	50	1066.66
70' (21,35)	36 - 40	38 - 42	6	192	4100	32	683.33
84' (25,60)	12 - 24	13 - 26	6	300	7680	50	1280.00
84' (25,60)	25 - 34	27 - 36	4	200	5120	50	1280.00
84' (25,60)	36 - 40	38 - 42	4	128	3280	32	820.00
95' (29,00)	12 - 24	13 - 26	6	300	8700	50	1450.00
95' (29,00)	25 - 34	27 - 36	4	200	5800	50	1450.00
95' (29,00)	36 - 40	38 - 42	4	128	3700	32	925.00
110' (33,60)	12 - 34	13 - 36	4	200	6720	50	1680.00
110' (33,60)	36 - 40	38 - 42	4	128	4300	32	1075.00
125' (38,20)	12 - 34	13 - 36	4	200	7620	50	1905.00
125' (38,20)	36 - 40	38 - 42	4	128	4880	32	1220.00
140' (42,70)	12 - 34	13 - 36	4	200	8540	50	2132.50
140' (42,70)	36 - 40	38 - 42	4	128	5460	32	1365.00
160' (48,70)	12 - 25	13 - 27	4	200	9750	50	2437.50
160' (48,70)	26 - 40	28 - 42	4	128	6240	32	1560.00
190' (57,90)	12 -18	13 - 20	4	200	11580	50	2895.00
190' (57,90)	19 - 40	21 - 42	4	128	7410	32	1852.50
210' (64,00)	12 - 18	13 - 20	4	200	12800	50	3200.00
210' (64,00)	19 - 40	21 - 42	4	128	8190	32	2047.50

Viscofan Cellulose Casings



Recommended Stuffing Conditions

Please bear in mind that the correct nozzle diameter must be used for the applicable calibre Viscofan casings. Cellulose casings can be used without any preconditioning. Always fill only to recommended filling diameter.

	REFERENCE		FRANK-	A-MATIC	SEMI-AUTOMATIC MACHINES				
EUR CALI- BRATIONS	USA CALI- BRATIONS	REC. STUFFING DIAMETERS Ø ± 0,4 MM.	Ø MM.	STUFFING TUBE NO.	CHUCK NO.	STUFFING TUBE AND BREAK NO.			
12	13	13,7	7,8	10	13-14	8			
13	14	14,3	7,8	10	14-15	8			
14	15	15,0	7,8-8,7	10-11	15-16	8-9			
15	16	15,7	7,8-8,7	10-11	15-16	8-9			
15,5	17	16,3	8,7	11	16-17	9			
16	18	17,0	9,5	12	16-17-18	9-10			
17	19	17,8	9,5	12	17-18-19	10			
18	20	18,5	10,3	13	18-19	11			
19	21	19,3	10,3	13	19-20	11-12			
20	22	20,0	11,1	14	20-21	12			
21	23	20,5	11,1-11,9	14-15	20-21-22	12-13			
22	24	21,5	11,9	15	21-22-23	12			
23	25	22,5	11,9-12,7	15-16	22-23	12-13			
24	26	23,5	11,9-12,7	15-16	22-23-24	12-13			
25	27	24,5	12,7-13,5	16-17	23-24-25	13-14			
26	28	25,5	13,5-14,3	17-18	25-26	15			
27	29	26,5	13,5-14,3	17-18	25-26-27	14-15			
28	30	27,5	15,1	19	26-27-28	14-15			
29	31	28,5	15,8	20	29	15-16			
30	32	29,5	15,8	20	29	15-16			
32	34	31,5	15,8	20	29	18			
34	36	33,5				20			
36	38	35,5				20			
38	40	37,5				22			
40	42	39,5				22			

Naturin Collagen Casings



Introduction

Naturin offers you the same quality, calibre, consistency, hygiene and quality control encountered in Viscofan cellulose casings. Naturin casings offer you a high degree of working durability with guaranteed tenderness. Your production efficiency will improve using Naturin, which are made from high quality collagen. Collagen is a natural protein with high mechanical resistance and excellent digestibility. Naturin casings are edible and provide your products with the right bite and the proper texture.

Naturin



Naturin Collagen Casings



Our wide variety of edible collagen casings have enjoyed world-wide popularity for decades. Whether it be for processed sausages, fresh sausages, pre-cooked fried sausages or dry-cured snacks – every edible collagen casing from Viscofan is a classic.

Product Range

NATURIN NDX:

For smoked and unsmoked processed sausages (e.g. Frankfurter), for pre-cooked fried sausages, dry sausages or dry wors.

NATURIN TWLK:

For Kosher sausages.

NATURIN NDC-M-FR:

For fresh sausages.

Calibres

Naturin ND-Types: 13 mm – 33 mm Naturin TWL: 17 mm – 32 mm Naturin NDC-M-FR: 17 mm – 33 mm

Colours

NATURIN NDX-TYPES:

Clear, yellow, salmon red, red-11, red-22, non-smoker, deep red, caramel and fresh bloom.

NATURIN TWLK:

Clear.

NATURIN NDC-M-FR:

Clear.

Processing

- Fill directly in the direction indicated without prior soaking.
- Calibre = filling calibre.
- The cooking temperature should not exceed 76° C.
- All standard smoking and cooking systems can be used.

Naturin Collagen Casings



ADVANTAGE	DESCRIPTION
Appearance	Edible collagen casings give a perfect natural matt look to your sausages.
Calibre Consistency	Outstanding calibre consistency creates identical sausages.
Crisp and Tender Bite	The smoking process can be adapted to make sausages processed in our edible collagen casings extra tender or to give them a particularly crisp bite. This gives you the flexibility to create your very own extra-tender or crisp-bite sausage.
Freezing	Fresh sausages made in Naturin NDC-M-FR lose no quality when frozen, and are therefore ideal for freezing.
Frying Performance	Casings for this application can boast of excellent frying properties, which ensure appetising products.
Less Weight Loss	In general, much less weight is lost during cooking than when using natural casings.
Machineability	Edible collagen casings offer high-level stability, making them perfectly suited to all modern filling systems.
Processing Performance	Edible collagen casings excel in processing.
Product Range	You will always find the perfect casing for your product from our wide variety of edible collagen casings.
Productivity	The efficiency in production gained by using our edible collagen casings means cost savings, since the yield per hour can be greatly increased. It also opens your door to cost- and time-saving measures such as lower labour utilisation and continuous production.
Ready to Stuff	Edible collagen casings are ready to stuff, and can therefore be filled straight out of the packaging without prior soaking.
Retail Packaging	Since your individual sausages made in our edible collagen casings will be uniform in size they are perfect for pre-packed retail units.
Smoking	Your product in our edible collagen casings will show excellent results when smoked. A perfectly balanced uptake of smoke will give your product the perfect look. Your smoking cycle will be considerably shorter than when using natural casings.

Naturin Collagen Casings



In the following table you will find all the details concerning the packaging of cartons and caddies according to the different sizes and lengths, filling capacities, recommended stuffing calibres and stuffing tubes.

APPROXIMATE FILLING CAPACITY KG PER METRE	0.2	0.2	0.22	0.22	0.25	0.25	0.31	0.31	0.33	0.33	0.39	0.39	0.45	0.45	0.5	0.5	0.55	0.55
MAXIMUM STUFFING NOZZLE MM	10	10	1		12	12	12	12	13	13	16	16	16	16	18	18	19	19
RECOMMENDED STUFFING CALIBRE MM	18+/-0.5	18+/-0.5	20+/-0.5	20+/-0.5	21+/-0.5	21+/-0.5	22+/-0.5	22+/-0.5	23+/-0.5	23+/-0.5	26+/-0.5	26+/-0.5	28+/-0.5	28+/-0.5	30+/-0.5	30+/-0.5	32+/-0.5	32+/-0.5
METRES PER CADDY	1097.28	1536.16	762.00	1066.66	762.00	1066.66	762.00	1066.66	762.00	1066.66	655.32	917.33	487.68	682.67	487.68	682.67	426.72	597.33
STICKS PER CADDY	20	20	32	50	50	32	50	50	32	20	50	32	50	32	50	32	50	32
STICKS PER CADDY	72	72	50	50	50	50	50	50	50	20	43	43	32	32	32	32	28	28
METRES PER CARTON	6583.68	9217.00	4572.00	6400.00	4572.00	6400.00	4572.00	6400.00	4572.00	6400.00	3931.92	5504.00	2926.08	4069.00	2926.08	4096.00	2560.32	3584.00
STICKS PER CARTON	432	432	300	300	300	300	300	300	300	300	258	258	192	192	192	192	168	168
CADDIES PER CARTON	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
EUR CALIBRA- TIONS	18	18	20	20	21	21	22	22	23	23	26	26	28	28	30	30	32	32
FEET PER STICK	20	70	50	70	20	70	50	70	50	70	20	70	50	70	50	70	20	70

Naturin Collagen Casings



Naturin NDC-M-FR

USES

Naturin NDC-M-FR is designed for use in the manufacture of all types of fresh, refrigerated or individually quick frozen (IQF) sausages, which require excellent frying performance and a tender bite.

PROPERTIES

- Edible, with a very tender bite.
- Suitable for high speed automatic stuffing machines.
- Very hygienic. Can extend the sausage shelf-life.
- Ready to use.
- Excellent sausage appearance: clarity of casing enhances bloom, ends closed tightly in the final link.
- Quick "wet out"
- Size uniformity, excellent portion control in the packaging operations.
- Excellent frying performance (grill, deep-fat and shallow fry).
- Constant diameter.
- Clear

Naturin NDX

USES

This type of casing is designed for the production of cooked processed sausages, whether smoked or not, such as viennas. Naturin NDX can also be used for the production of snack-type dried-cured sausages and dry wors. Naturin NDX casings are available in different colours for cooked sausages, for example Naturin NDX non smoker will have a smoked colour look after cooking. No need to smoke.

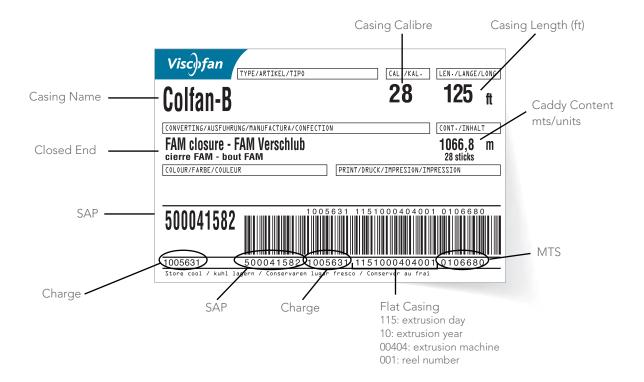
PROPERTIES

- Ready to use.
- Unique, tender bite.
- Very hygienic. Increases product shelf-life.
- Consistency of calibre and smoking quality.
- Excellent for use on automatic machines.
- Excellent sausage appearance.
- Consistent drying.
- Highly permeable to smoke.
- Capable of being cooked at up to 80° C without gelatination.
- Good adherence.



How To Read A Label

Traceability

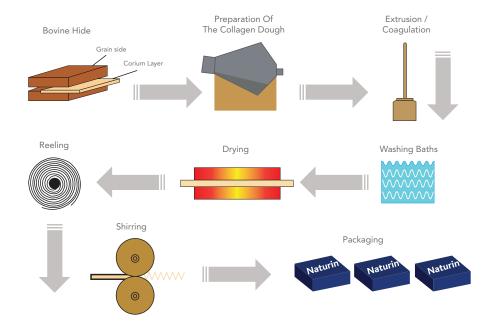




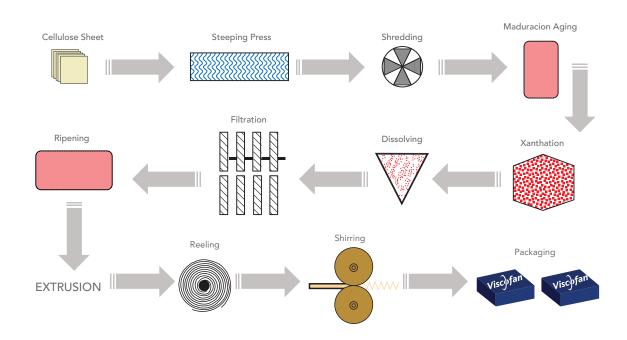


The Manufacturing Process

Collagen Casings



Cellulose Casings





Frequently Asked Questions...

Viscofan Cellulose Casings

What are cellulose casings made from?
 Viscofan cellulose casings are made from regenerated cellulose.

2. Are cellulose casings ready to use?

Viscofan cellulose casings are delivered in shirred sticks that do not require soaking. In order to ensure the best possible stuffing performance, the casings are packed in caddies that seal in the moisture and preserve the product in storage.

3. What are the advantages of using Viscofan Cellulose casings?

Viscofan cellulose casings are consistent in diameter, smokable, impermeable to unwanted compounds in the smoke, easy to peel and guar-

antee a trouble free process. In manufacturing the advantages save time and labour costs through increased yields.

4. What is Easy Peel Quality?

Easy peel quality facilitates the peeling of the casing from the meat emulsion when using high speed peelers.

5. Why do cellulose casing come in stripes or in non transferable coloured casings?

Striped casings provide a simple solution for distinguishing between different types of end products on the factory floor. Non transferable coloured casings are ideal for preventing non peeled casings from being packed.

Naturin Collagen Casings

1. What is the best way to store Naturin Collagen casings?

Store in a cool and dry place. Recommended storage temperatures are between 5° C and 20° C. Do not open caddy until ready to use. To store unused casings, place them back in caddy and wrap in plastic to prevent casing from drying out or picking up moisture. Under proper storage conditions, the collagen casings have a shelf life of 24 months.

2. What are Naturin Collagen casings made from?

Naturin Collagen casings are prepared from collagen, which is derived from the corium layer of cattle hides.

3. What are the benefits of using Naturin Collagen Casings?

In manufacturing, the benefits are reduced labour costs and time saving through higher productivity. Other benefits are casing consistency, traceability and pricing stability.

4. How tightly should Naturin Collagen casings be filled?

Collagen casings are not as elastic as natural casings; they should therefore be filled to the recommended diameter.

5. Do you need to soak collagen casings?

Edible collagen casings are ready to use and can be filled directly out of the caddy without prior soaking.

6. Is collagen edible?

Yes, it is a natural protein synthesised into a casing. Some wider diameters of collagen casings may be too tough to chew but they are technically edible.

7. What causes the product to wrinkle after cooking?

The product may be under filled or the product is too dry prior to going into the cooker or has not been cooled down properly after cooking.

8. What causes casing to have streaks after cooking?

If the product is not dried properly before smoking or cooking commences, drops of water will run down the casing, resulting in streaking.

Are there different Collagens casings for different products?

Yes, Naturin has two types. NDX for processed meats and dry wors and NDCMFR for fresh sausages.

Packaging

Crown National ensures that our customers have access to the latest in packaging quality and technology. We guarantee quality, size and quantity at all times.









Index

NTRODUCTION
ALUMINIUM FOIL CONTAINERS238
BASE AND LIDDINGS221
PAPER AND CLOTH RANGE235
PLASTIC BAGS Biltong Bags
POLONY AND LOAF CASINGS229
POLYSTYRENE TRAYS Polystyrene Trays
PVC FOOD FILM227
PVC FOOD FILM TWIN PACK228
VACUUM BAGS Crown Shrink Bags
FREQUENTLY ASKED QUESTIONS239

Packaging



Introduction

Guaranteed Quality, Size and Quantity

Crown National has built up a reputation as a leader in supplying quality packaging to the food industry. This reputation has stemmed from carefully selecting the manufactures we at Crown National choose to do business with. These suppliers have joined hands with Crown National in order to bring ethics back into the packaging industry. This is why our guaranteed range is confidently supplied to you as high quality standard products and correctly sized and are packed according to what is stated on the pack. It just makes sense to buy these lines from Crown National as everything has already been done for you, to all the high standards that we conform to.

IT JUST MAKES SENSE!







Certificate of Conformity

Assessment Date 16 Nov 2011

Next Assessment Due 19 Nov 2012

Certificate Expiry Date 31 Dec 2012

> Certificate Number C0082286

> > BRC Site Code 1815002

BRC Auditor No 207094

> Date of Issue 22 Dec 2011

Awarded to:

Ciba Packaging

3 Graph Avenue Montague Garcens Cape Town 7441 South Africa

Standard:

BRC/IOP Global Standard Food Packaging and other Packaging Materials (Issue 4 - February 2011)

Category: High Hygiene Risk

Scope of Certification

The manufacture of EPS foam, PET, PVC, 5 layer barrier film, laminates and their conversion into food packaging, and the storage and dispatch of final goods.

Exclusions: The operations at the Unsgaard Site

Certification Grade: A

Signed on behalf of NSF-CMi Certification Ltd









This certificate is the property of RSF-CNI Certification Ltd and must be returned immediately an request, to check its validity write to RSF-CNI Certification Ltd, Nantorough Business Park, Long Hardwrough Osen DXSF-RSJ UK. E-mail: empoirteethed-concentrication.com

Packaging

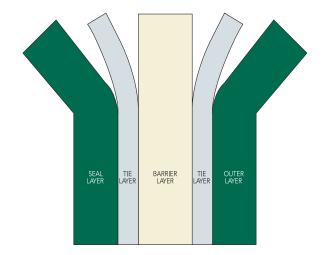


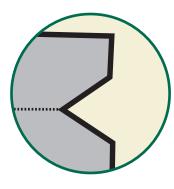
Crown National continually works in close liaison with manufacturers to ensure that our customers have access to the latest in packaging quality and technology. Our constant market research and product development programme ensures that Crown National packaging is the finest available in terms of added value, protection of the packaged goods and ultimate product merchandising.

Natvac Vacuum Bags

The 5 Layer Production Process In Vacuum Bags

Crown National's innovative approach has resulted in the introduction of the 5 layer production process to the South African market. All Crown National vacuum bags are now produced in this manner. The unique barrier layer contains nylon, which adds extreme strength and makes the bag impermeable to oxygen and water vapour.





Convenient 'V' notch for easy opening exclusive to Crown National Natvac Bags

COMPARED TO YOUR NORMAL 3 LAYER BAGS, OUR SUPERIOR TECHNOLOGY 5 LAYER VACUUM BAGS GIVE YOU THESE AMAZING BENEFITS:

- Total oxygen barrier.
- Extra strength more puncture resistant.
- Minimal oxygen permeability and water vapour transmission rates, reduced weight loss and longer shelf life.
- Ideal for vacuum packing and gas flushing.
- Outstanding barrier properties against bacteria.
- Better colour retention.
- The best available value for money.
- Available in a wide range of sizes.

Plain Natvac Vacuum Bags



Our top quality 5-layer barrier bags provide a clear and highly secure pouch. The outer and inner layers are made from polyolefin for extra water and moisture protection. The extra thick inner layer provides a high barrier against oxygen to retain colour. This gives your product a better visual appeal.

Our extensive range of multilayered barrier bags are manufactured to stringent international standards. This ensures product and food safety.



PRODUCT	DIMENSIONS	QUANTITY	PRODUCT CODE
Natvac Bags	10 x 15 cm	(Per 100)	6406000
Natvac Bags	10 x 20 cm	(Per 100)	6406007
Natvac Espatada Bags	10 x 60 cm	(Per 100)	6405999
Natvac Bags	11 x 18.5 cm	(Per 100)	6406005
Natvac Bags	15 x 20 cm	(Per 100)	6406333
Natvac Bags	15 x 25 cm	(Per 100)	6406006
Natvac Bags	20 x 20 cm	(Per 100)	6406012
Natvac Bags	20 x 30 cm	(Per 100)	6406300
Natvac Bags	20 x 35 cm	(Per 100)	6406990
Natvac Bags	20 x 45 cm	(Per 100)	6406100
Natvac Bags	25 x 30 cm	(Per 100)	6406379
Natvac Bags	25 x 35 cm	(Per 100)	6406368
Natvac Bags	25 x 40 cm	(Per 100)	6406304

Plain Natvac Vacuum Bags



PRODUCT	DIMENSIONS	QUANTITY	PRODUCT CODE
Natvac Bags	25 x 45 cm	(Per 100)	6406305
Natvac Bags	25 x 50 cm	(Per 100)	6406311
Natvac Bags	25 x 75 cm	(Per 100)	6406307
Natvac Bags	30 x 40 cm	(Per 100)	6406308
Natvac Bags	30 x 45 cm	(Per 100)	6406309
Natvac Bags	35 x 45 cm	(Per 100)	6406328
Natvac Bags	35 x 55 cm	(Per 100)	6406314
Natvac Bags	40 x 60 cm	(Per 100)	6406471
Natvac Bags	40 x 70 cm	(Per 100)	6406001
Natvac Bags	43 x 80 cm	(Per 100)	6406004



Crown Shrink Bags



We have a wide range of Shrink Barrier Bags available. Our range includes a high oxygen barrier to preserve and extend shelf life of fresh and processed meat products, as well as variable gas barrier bags to allow for the ripening of cheese.

The excellent clarity of our 7-layer bags assists the packer with retail display and merchandising opportunities. Our Shrink Barrier Bags can be surface printed in up to 6 colours. Crown Shrink Bags are manufactured to be compliant with most international production and food contact requirements.



PRODUCT	DIMENSIONS	MICRON	QUANTITY	PRODUCT CODE
Shrink Bags	350 x 550 mm	48 Micron	(Per 600)	6406148
Shrink Bags	400 x 600 mm	48 Micron	(Per 600)	6406149
Shrink Bags	205 x 300 mm	70 Micron	(Per 900)	6406170
Shrink Bags	300 x 450 mm	70 Micron	(Per 750)	6406171
Shrink Bags	200 x 650 mm	48 Micron	(Per 800)	6406172
Shrink Bags	250 x 750 mm	48 Micron	(Per 600)	6406173
Shrink Bags	250 x 550 mm	70 Micron	(Per 750)	6406174
Shrink Cheese Bags	400 x 530 mm		(Per 800)	6406220

Crown Shrink Bags



PRODUCT	DIMENSIONS	MICRON	QUANTITY	PRODUCT CODE
Shrink Cheese Bags	200 x 440 mm		(Per 800)	6406221
Shrink Bags	200 x 700 mm	48 Micron	(Per 500)	6406223
Shrink Bags	300 x 400 mm	48 Micron	(Per 1000)	6406229
Shrink Bags	200 x 300 mm	48 Micron	(Per 1200)	6406231
Shrink Bags	200 x 440 mm	48 Micron	(Per 800)	6406232
Shrink Bags	300 x 750 mm	48 Micron	(Per 600)	6406233
Shrink Bags	350 x 500 mm	48 Micron	(Per 500)	6406234
Shrink Bags	250 x 350 mm	70 Micron	(Per 900)	6406255



Generic Printed Vacuum Bags



Bon Appetit Printed Vacuum Bags

PRODUCT	FILLING CAPACITY	QUANTITY	PRODUCT CODE
Bon Appetit #1	Filling Capacity 50-125 g	(Per 100)	6406329
Bon Appetit #2	Filling Capacity 200-400 g	(Per 100)	6406341

NOTE: Bon Appetit bags can be overprinted with customised information.

Jester Vacuum Bags

PRODUCT	FILLING CAPACITY	QUANTITY	PRODUCT CODE
Jester Bags Blue/White	15 x 25 cm	(Per 100)	6406110
Jester Bags Blue/White	20 x 30 cm	(Per 100)	6406118
Jester Bags Red/White	15 x 25 cm	(Per 100)	6406114
Jester Bags Red/White	20 x 30 cm	(Per 100)	6406119

BON APETIT BAGS



Polyester Laminated Vacuum Bags



BENEFITS:

- Laminated production process.
- Extended product shelf life.
- Available in black, blue, red, gold and silver.
- Attractive, striking product display for improved merchandising.
- Available in a wide range of sizes.

SIZE	COLOUR	QUANTITY	PRODUCT CODE
165 x 260 mm	Black	(Per 100)	6407010
165 x 260 mm	Gold	(Per 100)	6407003
165 x 260 mm	Silver	(Per 100)	6407004
200 x 300 mm	Black	(Per 100)	6407011
200 x 300 mm	Gold	(Per 100)	6407001
200 x 300 mm	Silver	(Per 100)	6407002

POLYESTER LAMINATED VACUUM BAGS



Base and Liddings



The latest and very effective way of vacuum packaging meat products is using the base and lidding method. This combines the usual advantages of vacuum packaging but allows for improved product visibility on the one side and at the same time provides a flat surface area (the lid) for full colour printing - advertising and branding.

Base and lidding packaging has major advantages for medium to large factories supplying to major retail outlets. Your Crown representative can assist you with obtaining the necessary equipment and with the overprint of ads/branding on the lid.

Base and Liddings

N/A



Polystyrene Trays

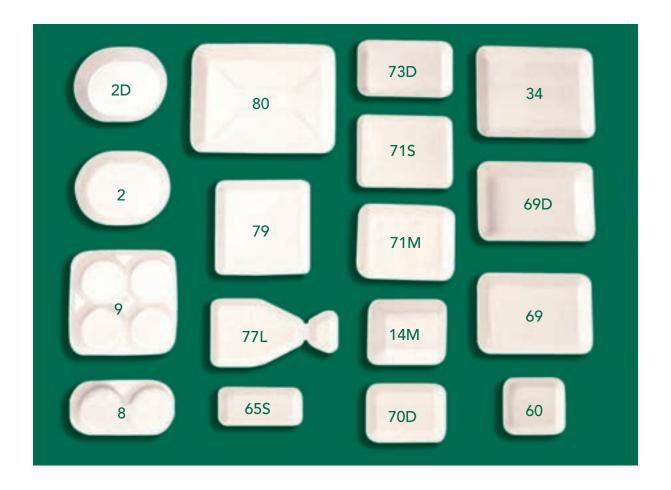


A wide range of polystyrene trays are available to meet the needs of our customers. Polystyrene foamed trays are used for fresh packaging of red meat, poultry, seafood, fruit and vegetables and various other applications such as front store packaging. The trays are ideal for pre-packaging and display purposes. Polystyrene foamed trays have the lowest carbon footprint of all packaging trays.

PRODUCT	SIZE	QUANTITIY (PER PACK)	PRODUCT CODE (WHITE)	PRODUCT CODE (BLACK)
#2	221 x 174 x 18 mm	800	6413016	6410038
#2D	215 x 186 x 33 mm	500	6413017	6410031
#8	235 x 120 x 27 mm	500	6413063	6410043
#9	235 x 235 x 36 mm	200	6413025	6413026
#14M	175 x 143 x 37 mm	1000	6413018	6410041
#34	285 x 226 x 20 mm	500	6413020	6410032
#60	141 x 126 x 21 mm	1500	6413021	6410054
#65	190 x 88 x 21 mm	1500	6410028	6410055
#69	264 x 185 x 25 mm	500	6413022	6410034
#69D	270 x 185 x 45 mm	400	6413093	6410058
#70D	176 x 129 x 18 mm	1000	6413027	6410035
#71S	220 x 168 x 25 mm	1000	6410026	6410042
#71M	220 x 172 x 18 mm	1000	6413071	6410036
#73D	222 x 133 x 20 mm	1000	6413031	6410037
#77L	210 x 150 x 16 mm	1000	6413120	6410039
#79	225 x 225 x 20 mm	500	6413036	6410030
#80	329 x 255 x 36 mm	200	6413037	6410040

Polystyrene Trays







Polystyrene Take Away Range



A fast-food range is also available from Crown National. This range is ideal for take aways and convenient on-the-go meals. (HMR - Home Meal Replacement). There is a wide range available. All of our polystyrene trays are recyclable, CFC free and are BRC accredited. All our trays are food safe.

PRODUCT	SIZE	QUANTITY	PRODUCT CODE
40	250 x 145 x 60 mm (Division)	(Per 300)	6407010
41	250 x 145 x 60 mm	(Per 300)	6414135
6	Hamburger Box	(Per 500)	6410047
4	Hot Dog Box	(Per 500)	6413019
31	200 x 145 x 60 mm	(Per 300)	6410052
30	200 x 145 x 60 mm (Division)	(Per 300)	6410051
50	258 x 17 x 20 mm	(Per 300)	6410345
53	270 x 218 x 87 mm	(Per 300)	6410347



Coloured Polystyrene Trays



This coloured range of fast-food polystyrene trays has been specifically produced for the Rugby product range of boerewors and burgers curently available from Crown National. Colour-coded to three of South Africa's favourite teams, they are sure to be a winner in-store. However, these trays are bright and eye-catching and can be used for any products that you wish to draw attention to.

PRODUCT	COLOUR	QUANTITY	PRODUCT CODE
Fomo Tray Lions	Red	(Per 1000 = 4 x 250)	F71-R
	Red	$(Per 500 = 4 \times 125)$	F79R
Fomo Tray Cheetahs	Orange	(Per 1000 = 4 x 250)	F71-O
	Orange	$(Per 500 = 4 \times 125)$	F790
Fomo Tray Blue Bulls	Blue	(Per 1000 = 4 x 250)	F71-B
	Blue	$(Per 500 = 4 \times 125)$	F79B







POLYSTYRENE COLOURED RANGE





PVC Food Film



Our PVC Filmwrap has been specifically designed to protect fresh food, which enhances product presentation with a high gloss and visual appeal. Our production and technological capabilities allow us to produce film that is precise to customer's needs, whatever the application. The film can be used on manual or automated machines and can be supplied pre-perforated.

Single Pack

WHITE CODE	DIMENSIONS	FILM WIDTH	AVERAGE WRAPS PER 1400 M ROLL	AVERAGE WRAPS PER 1000 M ROLL	AVERAGE WRAPS PER 850 M ROLL
F002	215 x 181 x 19 mm	300 mm	3256	2326	1977
F02D	215 x 181 x 36 mm	300 mm	3256	2326	1977
F008	235 x 122 x 30 mm	300 mm	2979	2128	1809
F013	150 x 130 x 41 mm	300 mm	4667	3333	2833
F014	175 x 149 x 36 mm	300 mm	4000	2857	2429
F14S	175 x 149 x 21 mm	300 mm	4000	2857	2429
F015	174 x 143 x 54 mm	300 mm	4023	2874	2443
F034	275 x 216 x 21 mm	350 mm	2545	1818	1545
F060	156 x 131 x 20 mm	280 mm	4487	3205	2724
F69C	265 x 184 x 26 mm	380 mm	2642	1887	1604
F69D	265 x 184 x 45 mm	380 mm	2642	1887	1604
F070	179 x 131 x 20 mm	280 mm	3911	2793	2374
F071	215 x 163 x 18 mm	330 mm	3256	2326	1977
F71MC	215 x 163 x 22 mm	330 mm	3256	2326	1977
F073	225 x 137 x 22 mm	330 mm	3111	2222	1889
F074	192 x 137 x 24 mm	330 mm	3646	2604	2214
F075	260 x 130 x 18 mm	350 mm	2692	1923	1635
F079	220 x 220 x 20 mm	410 mm	3182	2273	1932
F080	334 x 262 x 34 mm	410 mm	2096	1497	1272

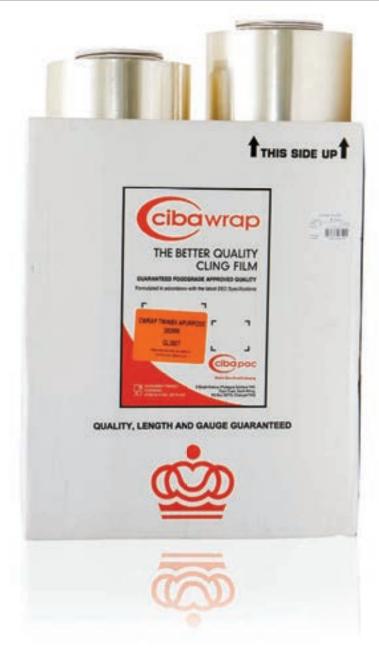
PVC Food Film Twin Pack



A unique concept, and as part of Crown National's guaranteed range, this product was designed to add value to our customers. It is a Twin Pack, 2 rolls of 850 m in a single box. The idea is for better handling, as the film roll is now lighter and allows full use of the film, as there is less compression of the film to the core. As the film is lighter there will be less pressure on the wrapping board. This is truly a unique offering and is guaranteed of its length, width and micron (thickness). This product is ONLY available through Crown National.

Twin Pack

PRODUCT	QUANTITY	PRODUCT CODE
GL 380 T	2 x 850 m A/P	GL380T
LL 380 T	2 x 850 m Econo	LL380T



Polony and Loaf Casings



Crown National is the leading supplier of Nylon Casings in South Africa using internationally accepted production technology. Our top quality Polony and Meat Casings are multi-layered co-extruded 5-layer seamless tubes. The inner layer is made of a blend of nylons to offer better film adhesion to the meat and a better shelf-life. The middle layers are made of polyolefin and tie layers to retain product form and promise form retention. Casings are printable on one side or both sides depending on requirement, using 6 colour UV flexo graphic printing.

CONSTRUCTION:

This is a multi layer, bi-axially oriented, co-extruded 5 layer seamless tube. The outer and inner layers are made of nylon. The inner layer is made up of a mix of 2 nylons to offer better film adhesion to the meat. The middle layers are made of polyolefin and adhesive or tie layers. It is recommended to store them at 15 - 25 degrees Celsius in a dry place, because of high hydroscoping of the nylon. We recommend pre-soaking to a temperature not exceeding 40 - 45 degrees Celsius to avoid premature shrinking of the casing.

Generic Polony and Loaf Casings

PRODUCT	QUANTITY	PRODUCT CODE
Clear Loaf Casings	110 mm (W) x 350 mm (L)	3490211
Crown 1 kg French	130 mm (W) x 350 mm (L) - cut/clipped	3490102
Crown 3 kg French	160 mm (W) x 600 mm (L) - cut/clipped	3490105
Crown 500 g Garlic	65 mm (W) x 500 mm (L) - cut/clipped	3490110

NOTE: Customised colour printed polony casings can be done for customers: -10 000 meters minimum per item.



Plastic Carrier Bags



Overprinting facilities available. Minimum 50 000 bags per size, per overprint.

PRODUCT	COLOUR	QUANTITY	PRODUCT CODE
Carrier Bags Maxi	Green / Brown	(Per 1000)	6404649
Carrier Bags Midi	White	(Per 1000)	6418682
Carrier Bags Midi	Black	(Per 1000)	6404651
Carrier Bags Mini	White	(Per 1000)	6418680
Carrier Bags Mini	Green / Brown	(Per 1000)	6418634
Carrier Bags Handy	White	(Per 1000)	6418681
Carrier Bags Handy	Black	(Per 1000)	6418683
Carrier Bags Handy	Green / Brown	(Per 1000)	6418693

PLASTIC CARRIER BAGS



Plastic Biltong Bags (Perforated)



Crown National plastic biltong bags are perfect for biltong as they allow the product to breathe and avoid moisture absorption, keeping the product fresh for longer.

PRODUCT	DIMENSIONS	QUANTITY	PRODUCT CODE
Biltong Bags	125 x 300 mm	(Per 1000)	6414087
Biltong Bags	125 x 400 mm	(Per 1000)	6414095

PLASTIC BILTONG BAGS

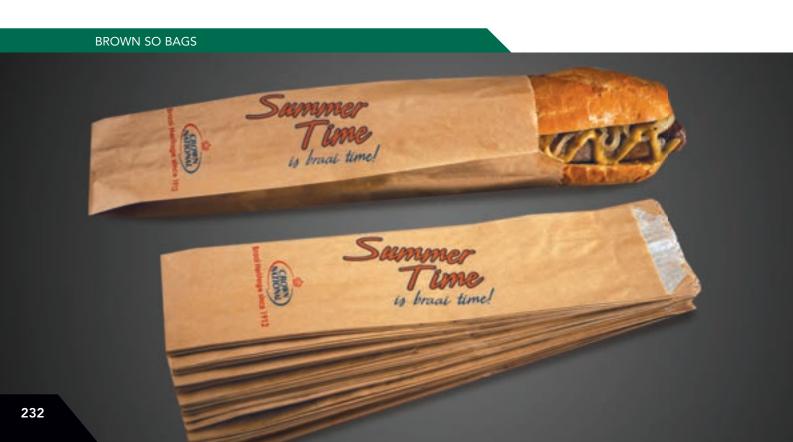


Brown SO Bags



Crown National has a wide variety of brown self opening bags available, for anything from slices, chunks and whole cuts of biltong to a foot long boerewors roll.

PRODUCT	DIMENSIONS	QUANTITY	PRODUCT CODE
Bag Brown Paper S.O. 1	80 x 60 x 187 mm	(Per 500)	6410542
Bag Brown Paper S.O. 2	110 x 60 x 195 mm	(Per 500)	6410518
Bag Brown Paper S.O. 3	128 x 74 x 195 mm	(Per 500)	6410537
Bag Brown Paper S.O. 4	128 x 74 x 225 mm	(Per 500)	6410536
Bag Brown Paper S.O. 6	155 x 90 x 287 mm	(Per 500)	6410535
Bag Brown Paper S.O. 8	165 x 102 x 301 mm	(Per 500)	6410534
Bag Brown Paper S.O. 14	180 x 102 x 380 mm	(Per 250)	6410540
Bag Brown Paper S.O. 16	196 x 115 x 385 mm	(Per 250)	6410539



Plastic Butcher Bags



Crown National stock a guaranteed range of butcher bags (LDPE), that is suitable for the food industry and forms to all market standards.

PRODUCT	DIMENSIONS	QUANTITY	PRODUCT CODE	SAMPLE
Butcher Bags	15 x 25 cm	(Per 100)	6418392	
Butcher Bags	20 x 30 cm	(Per 100)	6418570	EEET PACE 20 X 20 CM (FT. 2340 CE
Butcher Bags	25 x 39 cm Freez	(Per 100)	6418066	SELET PACE STILL STATES ST
Butcher Bags	25 x 40 cm	(Per 100)	6418783	SEZF PACE 33 4 0 CM 017, 200921
Butcher Bags	30 x 45 cm	(Per 100)	6418821	SELFY PACE 30 2 40 200 GTV- 200PGE
Butcher Bags Bone	29 x 44 cm	(Per 100)	6410478	**************************************
Butcher Bags Half Lamb	45 x 60 cm	(Per100)	6418937	EST PACK ANY TO CAN OTHER CONTROL ANY TO CAN OTHER CONTROL OT



packaging@crownnational.co.za

Paper and Cloth Range



HACCP approved paper and cloth products are available from Crown National in order that a high standard of hygiene can be maintained in your food preparation.

Economy Floor Stand

- Portable and lockable
- Galvanised resists corrosion and is easily cleaned
- Serrated edge cuts required length
- Reduces theft and waste
- Easy to use



CODE: ON REQUEST

WYPALL® L10 Wipers - Large Roll White

- Soft, but strong 1ply tissue
- 22 gsm
- Size 205 mm x 1500 m
- Ideal for general light-duty wiping
- Dispenser Economy Floor Stand



CODE: 8208452

SCOTT® Roll Control Towel – 1 Ply

- Off-set perforated roll makes one sheet available at a time
- Sheet by sheet dispensing reduces wastage and cost
- Reliable 1 ply quality
- 4 Rolls of 585 sheets



CODE: 8208468

Paper and Cloth Range



WYPALL® X50 Service Cloths

- Highly absorbent chemically bonded rayon wipers
- Ideal for general purpose cleaning and wiping tasks
- Colour coded system so that you can choose colours for specific tasks to avoid cross-contamination
- The answer to your all-purpose wiper needs
- Blue, Pink, Green and White, precut sheets
- Control usage and wastage
- Can easily be rinsed and re-used
- 45 gsm
- Packaging 5 packs of 50 per case

CODE: 8208506 – BLUE CODE: 8208455 – PINK CODE: 8208454 – GREEN CODE: 8204571 – WHITE



WYPALL® X80 Cleaning Cloths

- Different colours for different tasks helps prevent cross-contamination
- Disposable, but can be rinsed and re-used time and again
- Cost saving: the whole wipe is used
- Designed for high performance
- Has low lint properties
- Tough, strong, durable and tear-resistant
- Suitable for heavy-duty cleaning tasks and all round wiping
- No buttons or zippers like rags; always clean and ready to use
- Absorbs water and oil faster than rags
- Takes up less storage space and always looks neat and tidy
- Packed by colour in polybags with 6 packets of 50 wipers per case
- 125 gsm
- Available in 5 colours



CODE: 7566020 – WYPALL X80 CC NW IFLD GREEN (25)
CODE: 7565020 – WYPALL X80 CC NW IFLD BLUE (25)
CODE: 7568020 – WYPALL X80 CC NW IFOLD RED (25)
CODE: 7567020 – WYPALL X80 CC NW IFOLD YELLOW (25)

CODE: 7567020 - WHITE

CODE: 7445000 - WYPALL COL. CODE CLOTH CF (6 X 280)



PACKAGING FROM CROWN NATIONAL

packaging@crownnational.co.za

Aluminium Foil Containers



Crown National has a foil range specifically brought in for the butchers trade and HMR division (home meal replacement) to add more convenience to the meal.

Roasting Pan, Catering Size Lasagne, Rusks

Capacity: 3440 ml
 Top Out: 325 x 263 mm
 Top In: 298 x 235 mm
 Base: 265 x 205 mm
 Depth: 55 mm

CODE: 6420114



Multi Portion Freezer Dish, Pasta Dishes, Casseroles, Oven Baked Vegetables

Capacity: 1345 ml
Top Out: 250 x 160 mm
Top In: 232 x 143 mm
Base: 225 x 135 mm
Depth: 42 mm

CODE: 6420123



Small Take-away, Chinese Take-away, Single Portion Pasta Dishes Includes Plastic Dome lid

Capacity: 645 ml
 Top Out: 147 x 122 mm
 Top In: 128 x 103 mm
 Base: 110 x 84 mm
 Depth: 42 mm

CODE: 6420126



Medium Freezer Dish, Family Size Lasagne, Casseroles Includes Lid

Capacity: 890 ml
 Top Out: 210 x 158 mm
 Top In: 190 x 138 mm
 Base: 172 x 120 mm
 Depth: 38 mm

CODE: 6420128





Frequently Asked Questions...

Polystyrene foam trays:

PSPC = Polystyrene Packaging Council @ www.polystyrenepackaging.co.za

1. Is polystyrene foam recyclable?

Yes, post consumer polystyrene foam trays are recycled in South Africa.

2. Is microwave thawing recommended?

Yes, but no cooking at all and PVC cling/stretch film must be removed prior to microwaving.

3. Is heating of food in tray allowed?

No, this is regarded as cooking.

4. What is the formal definition of Polystyrene?

Polystyrene is a thermoplastic substance. Polystyrene is one of the most widely used kinds of plastic. It can be cast into moulds, for example yogurt cups, plastic cutlery, pens, rulers and CD and DVD cases.

5. What is styrene?

Styrene is a clear, colourless liquid that is derived from petroleum and natural gas by-products, but which also occurs naturally in food such as coffee, strawberries and cinnamon.

6. Do I come into contact with styrene?

Styrene is a natural component of some foods and is present in small amounts in foods such as cinnamon, beef, coffee beans, peanuts, wheat, oats, strawberries, and peaches.

Scientific studies have shown that the very small amount of styrene that people may be exposed to from packaging is about the same amount as comes from naturally-occurring styrene in foods.

7. Is styrene harmful to my health?

Styrene is harmless in the very small amounts most people might normally encounter in air or food.

8. What about the odour of styrene?

Styrene's distinctive odour can be detected even when styrene is present at extremely low levels - levels that are many, many times below any level that may result in a possible health effect.

9. What are CFCs?

CFCs, or chlorofluorocarbons were first introduced in the 1930s as safe replacements for refrigerants such as sulphur dioxide, ammonia, chloroform, and carbon tetrachloride. These uses eventually resulted in large emissions of CFCs into the atmosphere. The chlorine atoms then react with stratospheric ozone, breaking it down into oxygen.

CFCs are therefore now banned because they are the cause of the holes that developed in the ozone layers over the planet's polar regions.

10. Give me 4 good reasons why I should recycle?

- We only have enough landfill space for the next 3 years and by the time the last landfill site closes es down, we will be building mountains of waste equivalent to 6 000 rooms per day.
- One of the major contributors to greenhouse gasses (the gas in the atmosphere that prevents radiation from the earth to escape and in turn causes Global Warming) is Methane. Methane Gasses are mostly released from old landfill sites. Can you see how recycling will prevent Global Warming?
- The materials that you recycle will go back into the production streams and will save huge amounts of energy and raw materials.
- It is the right thing to do!
 Please go to our Polystyrene Recycling and Drop-off sites page for more information.

11. What products are made from recycled Polystyrene?

Polystyrene is not only versatile as a product, but also versatile in the recycling thereof. Products made from recycled Polystyrene include:

- Coat hangers
- Seedling trays
- Curtain rods, finials and holdbacks
- Cornices and skirtings
- Outdoor furniture
- Poles and decking



PVC stretch/cling film:

SAVA = SA Vinyl Association @ www.SAVinyls.co.za

PVC FOR PACKAGING

PVC continues to be widely used in cling film, shrink wrap, bottles and blister packaging, among others, based on its packaging properties. Cling film exhibits excellent high gas transmission rates which are vital for preservation of foodstuffs.

- Is PVC stretch/cling film recyclable?
 Not if contaminated with foodstuffs.
- Is microwave thawing recommended?
 No, not at all. Remove before thawing meat in trays in microwave.
- 3. Is heating of food packaged in cling film recommended?

Not at all.

4. PVC packaging may consist of residual vinyl chloride monomer which is regarded as a health hazard for food contact applications. Residual vinyl chloride monomer may be found in PVC as trace amounts which are regarded as

safe for use in PVC packaging applications.

5. PVC products contain heavy metal stabilisers such as lead which can potentially leach out of these products and are considered to be health hazards.

PVC packaging products have historically been free of lead and other heavy metal stabiliser systems.

6. PVC products cannot be recycled and eventually end up in landfills, which is not conducive to environmental sustainability.

Recycling of post-consumer PVC scrap is one of the key focus areas of SAVA.

7. What is the outlook for the PVC industry considering past and current de-selection policies and practices?

PVC products will continue to offer the best cost/performance ratio in the applications that they are used.

Vacuum Bags

Can one cook in vacuum bags?
 No, not at all as specified by the polymer supplier.

Can frozen meat be microwave thawed in a vacuum bag.

Yes, but not cooked and bag must be punctured before microwaved.

3. What is the shelf life of fresh meat in vacuum bags?

Medium term up to 3 weeks at below 50 degrees Celsius but must be evaluated by customer under ideal conditions w.r.t. hygiene standards and cold chain.

Shrink Bags

 At what temperature and for how long must the bag be exposed in order to shrink?
 Immersed in water between 850 degrees and 900 degrees Celsius or steamed for 1 to 2 seconds.

2. Will printing on vacuum bags distort with shrinkage of the bag?

No, the print will shrink proportionally.

3. What is the shelf life for fresh meat?
Long term up to 3 months below 50 degrees

Celsius to be evaluated by customer under ideal conditions w.r.t. hygiene standards and cold chain.

4. Is microwave thawing recommended? Yes, but no cooking and bag must be punctured before microwaved.

5. Can one cook the meat in the bag? Cooking is not recommended.

Product Labels

Crown National offers you product labels of excellent quality for a wide range of products. Ask your sales representative about these lines.







Index

INTRODUCTION
BOEREWORS RANGE 24
CHIEF'S CHOICE® RANGE
FLAVOURED RANGE 24.
MEISTER CLUB® RANGEFresh Meat Range24Sausage Range24Sweet Chilli Sausage Range24
MEISTER CLUB® COOK 'N GRILL® RANGE 24
MISCELLANEOUS RANGE
SOMETHING CHUNKY® RANGE
STETSON® BURGER RANGE
THE CENTENARY RANGE
THE RUGBY RANGE

Product Labels



Introduction

South Africa's new food labelling regulations came into effect on 1 March 2012. The goal of the regulation is to provide consumers with proper and accurate information on all labels of foodstuffs to assist them in their buying decisions. The regulation also aims to protect consumers from unsubstantiated claims or prohibited statements.

The following, as a minimum, should be displayed (in letter sizes as prescribed):

- Name of food
- List of ingredients: in descending order of mass
- Declaration of common allergens
- Storage instructions, before and after opening
- Indication of net contents by weight
- Date marking: Best Before (BB) and/or Sell By and/or Use By
- Batch or Lot Number
- QUID (quantitative ingredient declaration) for emphasized ingredients
- Country of origin
- Name and physical address of manufacturer, importer or seller

In the case of a butchery, the above information can be split between the product label and the mass scale label.

Consumers make a decision on what to buy within 0.2 seconds of seeing the products in-store, which prompted Crown National to design simple, eye-catching labels for a wide range of products. These labels should be used in conjunction with the suggested meat block and be accompanied by a mass scale label with the relevant information, to ensure compliance to the new Labelling Act. Note that where butcheries use allergens that are not used by Crown National, these should also be declared on the mass scale label as appropriate. The common allergens not used by Crown National are: Fish, Shellfish (Crustaceans and Molluscs), Peanuts and Tree Nuts.

Please note that Crown National may introduce other label ranges from time to time, which might not be listed in this catalogue. Please speak to your Crown National representative to enquire about these lines.



Chief's Choice® Range















Label Information

This is a uniquely formulated range of extended fresh products, which offers excellent value-for-money end products.





Boerewors Range









UNCOOKED - KEEP REFRIGERATED.









UNCOOKED - KEEP REFRIGERATED.

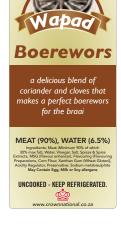
















Label Information

Crown National has a range of classic formulations to fit any taste profile. This range of labels will certainly catch the consumer's eye.

Flavoured Range



























Label Information

A range of flavoured fresh products to add variety to your counter. The range includes species sausages, burgers and wors.

Meister Club® Range



Fresh Meat Range











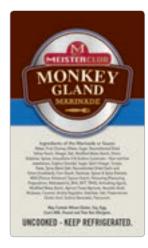
Meister Club® Range



Fresh Meat Range























Label Information

Meister Club® products have become synonymous with superior quality and are top of the range and invariably top sellers in their respective fields They add value to fresh meat products.

Meister Club® Sausage Range



Sausage Range









Sweet Chilli Sausage Range









Label Information

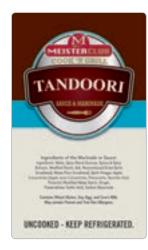
An upmarket range of species, fresh flavoured and cooked sausages for the discerning pallet.

Meister Club® Cook 'n Grill Range



Fresh Meat Range







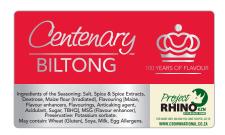
Label Information

Meister Club® Cook and Grill is a multi-purpose range of sauces for use in casseroles and stir fries or as a marinade, basting sauce, cook-in sauce or a pour-on sauce.



The Centenary Range









Label Information

As part of our Centenary Celebrations, Crown National launched a range of specially formulated products, including Boerewors, Dry Wors and Biltong, regarded as a true celebration of 100 years of flavour.



Miscellaneous Range























Label Information

A range of labels for those unique offerings.

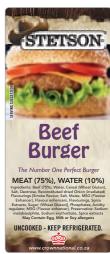
Stetson® Burger Range















Label Information

A range of burgers to suit any taste profile and occasion.



Something Chunky® Range





















Label Information

The Something Chunky® marinade range is a cost effective, tried-and-tested range, which is ideal for chicken, sosaties, steak and so much more.



The Rugby Range















Label Information

To bring excitement to the butchery, Crown National have launched a range of Officially Licensed Products for the leading rugby unions in South Africa. These lines will enable butcheries to capitalise on strong brand loyalties to generate additional profits.



Retail Meat Equipment

Crown National supplies high quality meat processing equipment to the butchery and food industries. We pride ourselves on being innovative and reliable, providing unequalled service.





Retail Meat Equipment

FREQUENTLY ASKED QUESTIONS.... 300



Index

EQUIPMENT ACCESSORIES AND SUNDRIES Cleaning Chemicals 295 Display Trays and Units 292 Hydraulic Sausage Fillers 262 Meat Tenderiser / Stripcutter 265 Mincer Knives and Plates 287 Smoking Cabinets 273 Wrapping Boards 282 Plastic Trays and Bins 295 **CLOTHING** Beard Masks..... 298 Mop Cap 298



Bowlcutters

Okto Bowlcutter

OUTSTANDING FEATURES:

- Aluminium castings bowl and lid
- Stove enamelled body and lid
- Heavy gauge stainless steel frame
- Special steel hot tin dipped shafts and bearinghousing
- Supplied with blade spanner
- Safety cut-off on lid
- SABS certified
- Bowl Capacity 20 litres

Okto Bowlcutter CODE: 8405131

Dimensions: 860 x 660 x 550 mm (LxWxH)

Weight: 175 kg

Power Requirements: 4.5 kW - 380 V, 3 phase



Okto Bowlcutter

Talsa Bowlcutters

OUTSTANDING FEATURES:

- 2 Year knife shaft warranty
- The absolute top-quality cutter for all experts
- Solid stainless steel construction
- Smooth, modern lines
- Ease of operation

Talsa 50 Litre Bowlcutter CODE: 9042069

Dimensions: 1250 x 940 x 1200 mm (LxWxH)

Weight: 600 kg

Power Requirements: 12.1 kW - 400 V, 50 Hz, 3 phase

Talsa 80 Litre Bowlcutter CODE: 9042073

Dimensions: 2090 x 1180 x 1270 mm (LxWxH)

Weight: 1100 kg

Power Requirements: 25 kW - 400 V, 50 Hz, 3 phase

Talsa 120 Litre Bowlcutter CODE: 9042072

Dimensions: 2320 x 1340 x 1330 mm (LxWxH)

Weight: 1700 kg

Power Requirements: 33 kW - 400 V, 50 Hz, 3 phase



Talsa Bowlcutter



Bandsaws

Okto Bandsaw Mark VII

OUTSTANDING FEATURES:

- Finish stainless steel powder coating and 3 CR12 stainless steel
- 304 Stainless steel work surfaces, carriage track and lower wheel door
- Stainless steel bone dust tray
- Belt drive motor
- Removable upper wheel assembly, table top and carriage

• Tin plated top and bottom wheels with scrapers

• Removable door panels

• Safety cut out micro switch cuts motor when doors are opened

• Fitted guide blocks and thickness gauge for straight even cutting

Conforms to SABS standards

Okto Bandsaw Mark VII

CODE: 84024980

Dimensions: $970 \times 900 \times 1835 \text{ mm (LxWxH)}$

Weight: 150 kg

Power Requirements: 1.5 kW – 380 V, 3 phase

OKTO



Okto Bandsaw Mark VII

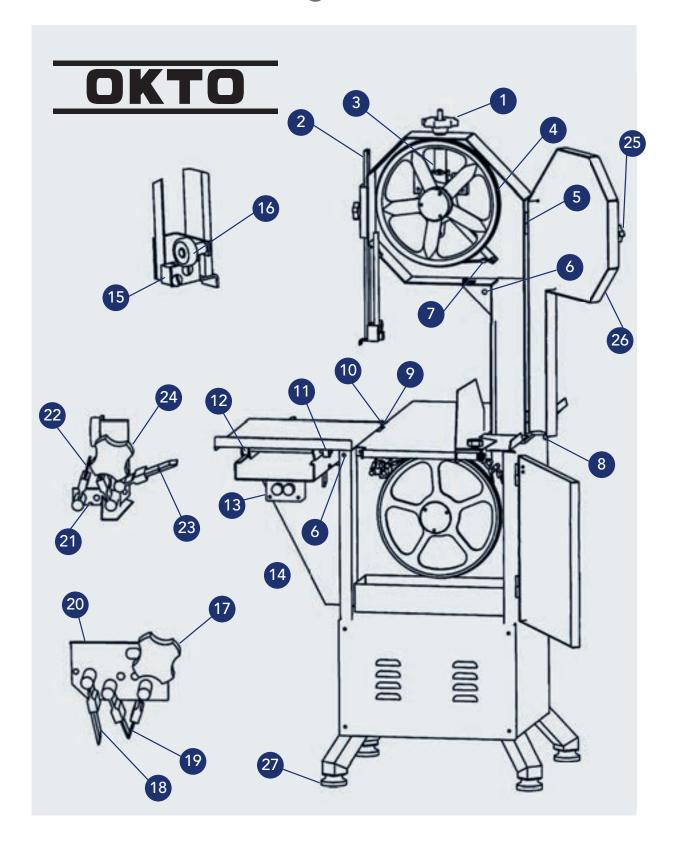


Okto Bandsaw - Diagram Reference

PART NUMBER	STOCK CODE	DESCRIPTION
1	2816202	Tension Knob *342
2	2814350	Upper Blade Support Assembly 32 (Complete Bar Excl Bracket and Screw)
	2810028	Carrier Bar Bracket (21)
	2815575	Panel Screw Knob 21
3	2815206	Top Wheel Yoke Assembly (Complete Yoke Excl Tention Knob)
	2815621	Tension Unit Stud #294
	2816083	Tension Unit Yoke 297M
	2815230	Tension Unit Pin *295
	2815613	Tension Spring *296
4	2820488	Upper Wheel Assembly (Complete Wheel Excluding Tention Knob)
	2816173	Upper Wheel 390201 (Wheel Only)
	2815273	Upper Wheel Bearing 6206
5	2814226	Hinge Common 26 (Fit Upper and Lower Doors)
6	2494067	Microswitch
7	28141020	Wheel Scraper 12
8	2816483	Table Locking Screw
9	2816377	Metal Guide Screw
	2815788	Lower Metal Guide
10	2815761	Fibre Guide
	2816148	Screw Special *818
11	2816170	Plain Wheel
12	2816149	Grooved Wheel
13	2814239	Push Button Red
	2814268	Push Button Green
14	2815168	Lower Wheel *256M
15	2814072	Upper Blade Guide Block 20X25
16	2815583	Support Bearing Guide 6200
17	2815338	Scraper Locking Screw
18	28141020	Wheel Scraper 12
19	2814099	Blade Scraper 10B
20	2814129	Rear Scraper Assembly 11 (Complete Scraper)
21	2814080	Bearing and Scraper 10 (Complete Scraper)
22	2814099	Blade Scraper 10B
23	28141020	Wheel Scraper 12
24	2815338	Scraper Locking Screw
25	2817366	Top Door Latch Comp
26	2814240	Top Door Comp
27	2815842	Pedestal Foot *1



Okto Bandsaw - Diagram





Mincers

Mincer #52 Okto MKII

OUTSTANDING FEATURES:

- Complete with 1 food safe stomper
 1 splash paddle, 1 knife and 1 plate
- Quandruplex chain drive with 1/2" sprocket and chain
- Supplied with spanner for lock ring
- Stainless steel cladding
- Hot tin dipped worm, barrel and ring nut
- Stainless steel foot guards
- Extra large 304 stainless steel tray for convenient operation and mixing of product
- Conforms to SABS standards
- Tray Size: 1300 x 765 x 155 mm (LxWxH)
- Capacity: 500 kg per hour.



Mincer #52 Okto MKII

Mincer #52 Okto MKII

Dimensions: 1435 x 840 x 1050 mm (LxWxH)

Weight: 130 kg

Power Requirements: 5.5 kW – 380 V, 3 phase

Okto 200 Litre Mixer

OUTSTANDING FEATURES:

- Body consists of tubular stainless steel frame with control box clad in 430 grade stainless steel
- Mixer drum and lid fabricated in 304 grade polished stainless steel
- Helical paddle is made from stainless steel for protection and ease of cleaning
- Mixing fitted with proximity switch to prevent operation with lid in open position
- Fitted with emergency stop button
- Mixer drum indexes through 90°
- Fitted with adjustable feet
- Max 70 kg batch



Okto 200 Litre Mixer

Dimensions: 1180 x 650 x 1060 mm (LxWxH)

Weight: 130 kg

Power Requirements: 1.5 kW – 380 V, 3 phase



Mincers

Crown #32 Mincer

OUTSTANDING FEATURES:

- Comes standard with 1 food safe stomper, 1 splash paddle, 1 knife and 1 plate
- The body and tray is made of high quality stainless steel
- The worm and cylinder are manufactured from tin plated cast iron
- Heavy duty gearbox
- Fitted with rubber feet to prevent slipping
- Fitted with hand guard
- Capacity: 300 kg/hr



Crown #32 Mincer 3 Phase CODE: MNB0032

Dimensions: $670 \times 1150 \times 680 \text{ mm}$ (DxWxH) Power Requirements: 2.2 kW - 380 V, 3 phase

Crown #32 Mincer Single Phase CODE: MNB2032

Dimensions: 670 x 1150 x 680 mm (DxWxH)

Power Requirements: 1.5 kW - 220-240 V, single phase

Crown #32 Mincer

Trespade Electric Mincer

OUTSTANDING FEATURES:

• Ideal for farmers, hunters, game lodges, home industries etc.

Trespade Electric Mincer No. 22 CODE: 9090665

Dimensions: 575 x 270 x 390 mm (DxWxH)

Trespade Electric Mincer No. 32 CODE: 9090681

Dimensions: 610 x 270 x 400 mm (DxWxH)



Trespade Electric Mincer No. 22



Trespade Electric Mincer No. 32



Hydraulic Sausage Fillers

Talsa Hydraulic Sausage Fillers

OUTSTANDING FEATURES:

- Reinforced pressure system allows for easy processing
- Very easy to clean
- On wheels with lifting handles (easy to move)
- Comfortable working position
- Convenient knee lever
- Automatic lock cover on lid
- Speed control knob
- Low power consumption
- Comes standard with 2 lid seals and 3 nozzles

Talsa Filler 15 LT PA CODE: 9042390

Auto on/off by knee lever

Dimensions: 670 x 420 x 980 mm (LxWxH)

Weight: 113 kg

Power Requirements: 1.5 kW – 380 V, 3 phase

Talsa Filler 26 LT PA CODE: 9042067

Auto on/off by knee lever

Dimensions: 720 x 460 x 1090 mm (LxWxH)

Weight: 144 kg

Power Requirements: 1.5 kW - 380 V, 3 phase

Talsa Filler 42 LT PAS CODE: 9042388

Auto on/off by knee lever

Dimensions: 780 x 550 x 1170 mm (LxWxH)

Weight: 278 kg

Power Requirements: 1.5 kW - 380 V, 3 phase

Talsa Filler 52 LT PAS CODE: 9042389

Auto on/off by knee lever

Dimensions: 800 x 590 x 1170 mm (LxWxH)

Weight: 316 kg

Power Requirements: 1.5 kW – 380 V, 3 phase



Talsa Filler 15 LT PA



Talsa Filler 26LT PA



Hydraulic Sausage Fillers







Talsa Filler 42 LT PAS



Talsa Filler 52 LT PAS





CROWN NATIONAL

Sausage Fillers

Trespade Hand Sausage Fillers

OUTSTANDING FEATURES:

- Stainless steel cylinders
- Robust connstruction
- Ideal for specialist and small runs of sausage
- Nozzles of 10 mm / 20 mm / 30 mm / 35 mm available

Trespade Filler 3 Litre Horizontal CODE: 9900052

Dimensions: 360 x 180 x 170 mm (LxWxH)

Weight: 4.5 kg Threaded Shaft Single Speed

Trespade Filler 5 Litre Horizontal CODE: 9090274

Dimensions: 530 x 200 x 200 mm (LxWxH)

Weight: 8 kg Threaded Shaft Two Speed

Trespade Filler 5 Litre Quick Release CODE: 9090275

Dimensions: 520 x 200 x 170 mm (LxWxH)

Weight: 6.5 kg

Quick Release Of Nozzle Saves Time

Quick Release Gearbox

Trespade Filler 10 Litre Horizontal CODE: 9090355

Dimensions: 730 x 240 x 220 mm (LxWxH)

Weight: 20 kg Two Speed Gearbox

Trespade Filler 7 Litre Vertical CODE: 9090290

Dimensions: 440 x 270 x 680 mm (LxWxH)

Weight: 21 kg Two Speed Gearbox

Trespade Filler 15 Litre Vertical CODE:9090401

Dimensions: 380 x 340 x 840 mm (LxWxH)

Weight: 34.5 kg Two Speed Gearbox



Trespade Filler 3 Litre Horizontal



Trespade Filler 5 Litre Horizontal



Trespade Filler 5 Litre Quick Release

Trespade Filler 10 Litre Horizontal



Trespade Filler 15 Litre Vertical



Meat Tenderiser / Stripcutter

Tor-rey Meat Tenderiser/Stripcutter MT-43

OUTSTANDING FEATURES:

- Long life with minimum maintenance
- Solid stainless steel construction
- Corrosion resistant
- Easy to clean
- Tenderises boneless meat without tearing it
- Tenderising unit easily removable
- Thermomagnetic protector
- Safe operation
- Maximum product width 210 mm
- Maximum product thickness 20 mm
- Optional strip cutting attachment 8 mm + 12 mm

Tor-rey Meat Tenderiser

CODE: 8431162

Dimensions: 500 x 240 x 510 mm (LxWxH)

Weight: 39 kg

Power Requirements: 0.75 kW - 220-240 V, single phase

Tor-rey Strip Cutting Attachment 8 mm CODE: 8431163

Tor-rey Strip Cutting Attachment 12 mm CODE: 8431164



Tor-rey Strip Cutting Attachment





Tor-rey Meat Tenderiser



Biltong Drying Cabinets

Crown Stainless Steel Biltong Cabinet

OUTSTANDING FEATURES:

- Glass front
- 24 x galvanised hanging rods plus 1 x S/S drip tray
- Thermostatically controlled
- Capacity: 100 kg wet meat
- Drying time: 3 4 days
- Proven 20% performance benefit over competition



Ideal machine for butcheries and supermarkets to produce high volumes of biltong

Crown Stainless Steel Biltong Cabinet CODE: 8624005

Dimensions: 740 x 1000 x 2015 mm (DxWxH)

Power Requirements: 2 x 1.5 kW – 220 V-240 V, single phase



Crown S/S Biltong Cabinet

Crown Stainless Steel Mini Biltong Cabinet

OUTSTANDING FEATURES:

- Including 1 x S/S drip tray and 10 x hanging rods
- Thermostatically controlled
- Efficient extraction fan for maximum air changes and uniform drying throughout the cabinet
- Capacity: 25 30 kg wet meat
- Drying time: 4 5 days

Ideal for small biltong maker or enthusiast

Crown Mini Biltong Cabinet

Dimensions: 460 x 580 x 2015 mm (DxWxH)

Power Requirements: 1, 75 kW – 220-240 V, single phase

CODE: 8624050



Crown S/S Mini Biltong Cabinet



Biltong Slicers

Biltong Slicers

OUTSTANDING FEATURES:

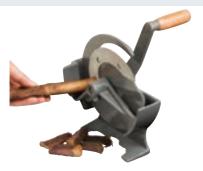
- The cutting discs are dynamically balanced with the blade for vibration free operation
- Hinged door facilitating easy access for cleaning
- Hooks fitted for holding packet in position while slicing
- Machine designed to be bolted to a table or stand

Crown Electric Biltong Slicer	CODE: 9060792
-------------------------------	---------------

Hand Operated Biltong Slicer (Slice) CODE: 8625200

Hand Operated Biltong Slicer (Chunk) CODE: 2835569

Biltong Slicer Blade CODE: 2835568



Hand Operated Biltong Slicer (Chunk)



Crown Electric Biltong Slicer



Hand Operated Biltong Slicer (Slice)

SLICED BILTONG





Patty Machines

To produce portion-controlled hamburgers, patties and other convenience food products from ground meat, fish, potatoes etc.

OUTSTANDING FEATURES:

- Fully automatic
- Variable speed machine
- Accurate variable portion control
- With one standard single-form drum
- With auto paper feed
- With wire cleaning
- Foot pedal for easy operation
- Optional: funnel hopper



Formatic Drums Available

Formatic R2200 Patty Machine

- 2200 forms per hour with a single form drum
- Can achieve a single form shape of up to 120 mm, double form shapes of up to 50 mm and triple form shapes of up to 33 mm diameter
- Foot pedal for easy operation
- Hopper capacity: 15 kg



Formatic R2200 Patty Machine

Formatic R2200 Patty Machine CODE: 9900505

Dimensions: 700 x 600 x 640 mm (LxWxH)

Weight: 95 kg

Power Requirements: 550 W - 220-240 V, single phase

Formatic R2200/180 Patty Machine

OUTSTANDING FEATURES:

- 4400 forms per hour
- Can achieve a single form shape of up to 120 mm, double form shapes of up to 55 mm and triple form shapes of up to 33 mm diameter
- Foot pedal for easy operation
- Hopper capacity: 15 kg

Formatic R2200/180 Patty Machine CODE: 9900506

Dimensions: 700 x 600 x 640 mm (LxWxH)

Weight: 95 kg

Power Requirements: 550 W – 220-240 V, single phase



Formatic R2200/180 Patty Machine



Patty Machines

Formatic C4000 Patty Machine

OUTSTANDING FEATURES:

- 4000 forms per hour
- Can achieve a single form shape of up to 135 mm, double form shapes of up to 62 mm and triple form shapes of up to 38 mm diameter
- Hopper capacity: 20 kg
- Foot pedal for easy operation



Formatic C4000 Patty Machine

Dimensions: 780 x 795 x 710 mm (LxWxH)

Weight: 115 kg

Power Requirements: 1100 W - 220-240 V, single phase

CODE: 9095004

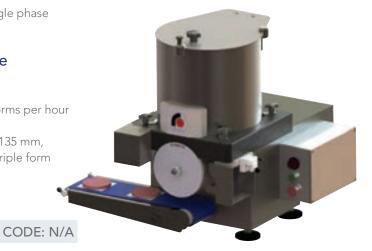
Formatic C4000/180 Patty Machine

OUTSTANDING FEATURES:

 4000 forms per hour, double drum 8000 forms per hour and triple drum 12000 forms per hour

 Can achieve a single form shape of up to 135 mm, double form shapes of up to 62 mm and triple form shapes of up to 38 mm diameter

Hopper capacity: 20 kg



Formatic C4000/180 Patty Machine

Formatic C4000/180 Patty Machine

Dimensions: 780 x 795 x 710 mm (LxWxH)

Weight: 115 kg

Power Requirements: 1100 W – 220-240 V, single phase

Formatic S4000 Patty Machine - Stacker

OUTSTANDING FEATURES:

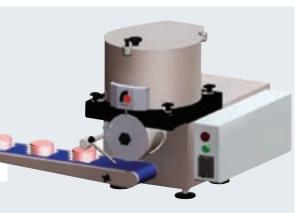
- 4000 forms per hour
- Can achieve a single form shape of up to 135 mm
- Hopper capacity: 20 kg
- Foot pedal for easy operation

Formatic \$4000 Patty Machine CODE: 9095005

Dimensions: 830 x 1295 x 760 mm (LxWxH)

Weight: 135 kg

Power Requirements: 1500 W – 220-240 V, single phase



Formatic S4000 Stacker



Hand Operated Patty Machines

Crown Patty Machines

OUTSTANDING FEATURES:

- Robust, heavy duty
- Cast aluminium construction
- Ideal for the production of both 100 mm and 130 mm patties
- Easy to use
- Forms patties quickly and efficiently

100 mm Cast Aluminium CODE: 8695682

130 mm Cast Aluminium CODE: 8695709



Crown Patty Machines

Semi-Automatic Patty Machines

Semi-Automatic Patty Machines

OUTSTANDING FEATURES:

- Comfortably forms 700 hamburger patties of ±100 g each per hour
- Fits onto Talsa Hydraulic Fillers
- Easy to use and easy to clean
- Can be adapted to fit any make of hydraulic filler

Patty Machine Semi-Auto HH3 100 mm

CODE: 9096011

Patty Machine Semi-Auto HH3 130 mm

CODE: 9096012

Patty Machine Semi-Automatic

Patty Presses

Patty Former Hand

OUTSTANDING FEATURES:

- Ideal for the production of both 100 mm and 130 mm patties
- Easy to use and easy to clean
- A piston system forms patties

100 mm Patty Former Hand CODE: 2826007

130 mm Patty Former Hand CODE: 2826008



Patty Presses



Cooking Cabinets

Delux Cooking Cabinet 380 V

OUTSTANDING FEATURES:

- High quality combination cooking and grilling cabinet
- With electronic temperature indication for cooking as well as core temperature probe
- Fitted with an automatic alarm and shutdown for low water level
- Supplied with 3 perforated stainless steel cooking trays
- 1 stainless steel grilling tray and 10 aluminium hanging rods
- Capacity: 600 litres



Delux Cooking Cabinet 380 V

Delux Cooking Cabinet 380 V CODE: 8684251

Dimensions: 1680 x 1280 x 770 mm (HxWxD)

Weight: 170 kg

Power Requirements: 3 x 1.5 kW grilling elements

3 x 3 kW cooking elements

(neutral and earth) 380 V, 3 phase

Econo Cooking Cabinet 380 V

OUTSTANDING FEATURES:

- Solidly constructed all stainless steel cabinet for steam cooking only
- Fitted with thermostatic temperature controller
- Supplied with 3 perforated stainless steel cooking trays
- 10 aluminium hanging rods
- Capacity: 600 litres



Dimensions: 1680 x 1280 x 770 mm (HxWxD)

Weight: 167 kg

Power Requirements: 3 x 3 kW cooking elements

(neutral and earth) 380 V, 3 phase





Cooking Cabinets

Cooker/Griller Junior 170 Litre

OUTSTANDING FEATURES:

- For use in the manufacture of all processed products such as viennas, loaves, french polonies etc
- Built-in griller ideal for roasting chickens, pastrami, etc
- Thermostatically controlled
- Up to 4 trays can be fitted
- Stainless steal finish
- Capacity: 170 litres



Cooker/Griller Junior 170 Litre

Cooker/Griller Junior 170 Litre CODE: 8684230

Dimensions: 610 x 1015 x 720 mm (HxWxD)

Weight: 80 kg

Power Requirements: $1 \times 3 \text{ kW cooking element}$

1 x 2 kW grilling elements 220-240 V, single phase





Smoking Cabinets

Junior Smoking Cabinet

OUTSTANDING FEATURES:

- Natural convection drying and smoking
- Smoke cycle control via electro mechanical timer
- Fitted with audible time lapse signal to indicate completion of cycle
- Complete stainless steel finish easy to clean
- Accessories supplied: 10 aluminium hanging rods, 1 grid for woodchips, 1 ashtray, 1 element protector grid
- Thermostatically controlled
- Capacity: 170 litres



Junior Smoking Cabinet

Junior Smoking Cabinet

Dimensions: 940 x 1015 x 610 mm (HxWxD)

Weight: 72 kg

Power Requirements: 2 x 1 kW drying element

 1×0.5 kW sawdust ignition element

CODE: 8684271

220-240 V, single phase

Smoking Cabinet 380N + Fan

OUTSTANDING FEATURES:

- Robust high quality all stainless steel smoking cabinet
- With efficient extraction fan for rapid drying and smoke removal
- This unit is fitted with an electronic timer for the smoke element and temperature control indication
- Supplied with 15 aluminium rods, sawdust tray, ashtray and element protective grid
- Capacity: 600 litres



Smoking Cabinet 380N + Fan

Smoking Cabinet 380N + Fan CODE: 8684251

Dimensions: 2020 x 1280 x 770 mm (HxWxD)

Weight: 216 kg

Power Requirements: 2 x 2.5 kW drying elements

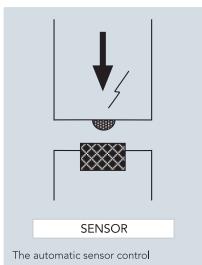
1 x 0.75 kW sawdust ignition element 380 V, 3 phase (neutral & earth), 50 Hz



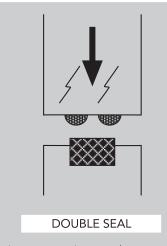
Vacuum Packaging Machines

Henkovac Vacuum Packaging Machines have been manufactured by H.F.E Vacuum Systems for over 40 years. Their quality and reliability are world famous and they are sold in over 60 countries worldwide. Henkovac machines owe their reputation to a combination of properties: robust construction, durability, operational safety, ease of operation and advanced production technology.

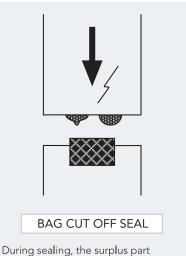
Henkovac Vacuum Packaging Machines



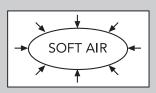
The automatic sensor control detects the vacuum pressure in the chamber and accordingly achieves the best possible vacuum in the quickest packing time.



The system, with two sealing wires, provides full security of the seam of the vacuum bag.

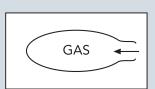


of the vacuum bag is cut off.



SOFT AIR

Using a special valve the vacuum is released slowly, which reduces creasing of the bag and damage to the product, as the vacuum bag settles gently on to the product.



GAS FLUSH

For packaging products in an atmosphere of CO₂ or N₂; gas flushing gives a beautiful presentation and extended shelf life.



Vacuum Packaging Machines

Henkovac Basic Range

The following outstanding features are standard on the Henkovac Basic Range:

OUTSTANDING FEATURES:

- Stainless steel frame
- Double seal
- Type Crownvac with digital time control all other models with sensor control
- Busch vacuum pump
- All models (except Crownvac) with gas flush, soft air and less vacuum features, as described previously
- All models (except Table Models) with aluminium cover with window

Crownvac

OUTSTANDING FEATURES:

- Made completely from high quality stainless steel
- Sealing length: 440 mm
- Chamber dimension: 460 x 420 x 170mm (WXDXH)
- Vacuum pump: Busch 16m³ /hr
- With double seal
- With digital time control
- One program

Crownvac CODE: 8646016

Dimensions: 540 x 610 x 480 mm (WxDxH)

Weight: 63 kg

Power Requirements: 230 V, 50 Hz, single phase



Henkovac St/St 150i Full

OUTSTANDING FEATURES:

- Made completely from high quality stainless steel
- With new wireless seal system
- Sealing length: 440 mm
- Chamber size: 460 x 420 x 170 mm (WxDxH)
- Pump size: 21 m³
- With double seal
- With soft air, less vacuum
- With 9-program digital time control panel
- Sensor control
- Gas flush

Henkovac St/St 150i Full CODE: 8646011

Dimensions: 540 x 610 x 480 mm (WxDxH)

Weight: 81 kg

Power Requirements: 50 Hz - 230 V, single phase



Henkovac ST/St 150i Full

NOTE: Plain Natvac Vacuum Bags can be found on page 215 of this catalogue



Vacuum Packaging Machines

Henkovac Basic Range

Henkovac ALU 200 Full

OUTSTANDING FEATURES:

- Aluminium chamber and window cover
- Floor model machine, including wheels
- Sealing length: 2 x 500 mm (left and right)
- Chamber size: 510 x 500 x 185 mm (WxDxH)
- Pump size: 40 m³
- Cycle time: 25 35 seconds
- Machine equipped with:

Double seal

Sensor control

Gas flush

Soft air

Less vacuum



Henkovac ALU 200 Full

Henkovac ALU 200 Full

Dimensions: 700 x 710 x 1035 mm (WxDxH)

Weight: 135 kg

Power Requirements: 3.3 kW - 400 V, 50 Hz, 3 phase

CODE: 8646007

Henkovac ALU 350 Full

OUTSTANDING FEATURES:

- Aluminium chamber and window cover
- Floor model machine, including wheels
- Double chamber unit
- Sealing length: 4 x 600 mm (front and back)
- Chamber dimensions: 2 x 600 x 420 x 170 mm (WxDxH)
- Pump size: 63 m³ / hr
- Cycle time: 20 40 seconds
- Machine equipped with:

Double seal

Sensor control

Gas flush

Soft air

Less vacuum

Henkovac ALU 350 Full CODE: 8646009

Dimensions: 1340 x 740 x 1040 mm (WxDxH)

Weight: 230 kg

Power Requirements: 3.3 kW - 400 V, 50 Hz, 3 phase



Henkovac ALU 350 Full



Vacuum Packaging Machines

Henkovac E Range

The following outstanding features are standard on the Henkovac E Range:

OUTSTANDING FEATURES:

- Aqua protect electronic parts protected against splash water and dust (IP 65 certified)
- 1 Mbar precision sensor control automatically achieves the best possible shelf life in the shortest packing time
- Service manager automatically indicates when service is required
- Auto weight protector detects when moisture and fluid in products start to boil under vacuum and stops the vacuum cycle automatically
- Busch vacuum pump
- Chamber and machine made entirely of high quality stainless steel
- Double seal (or cut-off seal)
- Vacuum plus extra vacuum time to release air trapped in vacuum bag
- Multicycle repetition of the vacuum cycle for a low residual oxygen level
- Gas flush for extended shelf life
- Less vacuum
- Soft air prevents creasing of vacuum bag and bag damage from sharp product edges

OPTIONAL EXTRAS AVAILABLE:

Bi-active seal

Henkovac F-193

OUTSTANDING FEATURES:

- Floor model machine, including wheels
- Sealing length: 2 x 430 mm (left and right)
- Chamber dimensions: 460 x 430 x 170 mm (WxDxH)
- Vacuum pump: 40 m³ / hr
- Cycle time: 20 40 seconds
- Machine equipped with:

Double seal

Sensor control

Vacuum plus

Service indicator

Gas flushing facility

Soft air

Less vacuum



Dimensions: 460 x 430 x 170 mm (WxDxH)

Weight: 133 kg

Power Requirements: 3.3 kW – 400 V, 50 Hz, 3 phase



Henkovac E-193



Vacuum Packaging Machines

Henkovac E Range

Henkovac E-203

OUTSTANDING FEATURES:

- Heavy duty floor model machine, including wheels
- Sealing length: 2 x 520 mm (left and right)
- Chamber dimensions: 510 x 520 x 190 mm (WxDxH)
- Vacuum pump: 63 m³ / hr
- Cycle time: 20 40 seconds
- Machine equipped with:

Double seal

Sensor control

Vacuum plus

Service indicator

Gas flushing facility

Soft air

Less vacuum

Henkovac E-203

Dimensions: 715 x 720 x 1100 mm (WxDxH)

Weight: 194 kg

Power Requirements: 3.5 kW - 400 V, 50 Hz, 3 phase



Henkovac E-203

Henkovac E-403 XL

OUTSTANDING FEATURES:

- Heavy duty, double chamber unit, including wheels
- Vacuum via cover vacuum is drawn through the cover, leaving the working table clear and improving hygiene levels

CODE: 8644962

- Extra seal length increased seal length means extra capacity
- Strong panel design newly designed covers make the machine more robust and allows access without tools
- IP65-Aqua protect all electronic parts are splash and dust-proof
- Chamber dimensions - $2 \times 760 \times 660 \times 205 \text{ mm} (WxDxH)$
- Seal length 4 x 695 mm
- Distance between seal beams 520 mm
- Vacuum pump 100 m³ (Busch)

CODE: 8644971 Henkovac E-403 XL

Dimensions: 1750 x 1040 x 1400 mm (LxWxH)

Weight: 590 kg

Power Requirements: 4.4 kW - 400 V, 50 Hz, 3 phase



Henkovac E-403 XL



Vacuum Packaging Machines

Henkovac E Range

Henkovac E-503 XL

OUTSTANDING FEATURES:

- Heavy duty, double chamber unit, including wheels
- Vacuum via cover vacuum is drawn through the cover, leaving the working table clear and improving hygiene levels
- Extra seal length increased seal length means extra capacity
- Strong panel design newly designed covers make the machine more robust and allows access without tools
- IP65–Aqua protect all electronic parts are splash- and dust-proof
- Chamber dimensions –
 2 x 1000 x 1010 x 220 mm (WxDxH)
- Seal length 4 x 920 mm
- Distance between seal beams 870 mm
- Vacuum pump 300 m³/hr (400 V x 50 Hz x 3 Ph)



Henkovac E-503 XL

Dimensions: 2200 x 1250 x 1600 mm (LxWxH)

Weight: 1055 kg

Power Requirements: 400 V, 50 Hz, 3 phase



CODE: 8644972



Meat Slicers

Rheninghaus Meat Slicers

All Rheninghaus slicers are compact, high efficiency machines. Their reliable construction requires minimal maintenance with hygienic easy to clean surfaces and built-in sharpeners. Classic polony slicers with air cooled motor and multi-grip belt. These are ideal for standard polonies and hams. The greater the blade size, the easier to cut.

Stellina Slicer 220 mm CODE: 9060731

Power Requirements: 0.15 kW, 230 V, 50 Hz

Argenta Slicer 250 mm CODE: 9060780

Power Requirements: 0.19 kW, 230 V, 50 Hz

Argenta Slicer 280 mm CODE: 9060750

Power Requirements: 0.19 kW, 230 V, 50 Hz

Start Slicer 300 mm CODE: 9060785

Power Requirements: 0.22 kW, 230 V, 50 Hz



Stellina Slicer 220 mm



Argenta Slicer 280 mm



Start Slicer 300 mm

Mondial Meat Slicers

These machines are especially designed for Deli work - suitable for the larger cuts such as fresh polonies, hams and roast beef.

Mondial Slicer 300 mm CODE: SLM0300

Power Requirements: 0.25 kW, 230 V, 50 Hz

Mondial Slicer 350 mm CODE: SLM0350

Power Requirements: 0.26 kW, 230 V, 50 Hz



Mondial Slicer 300 mm

Beta Meat Slicer

This machine is especially designed for dealing with wet cuts of meat. This is the foremost steak slicer on the market, with clamping mechanism to enable you to get clean cuts of raw meat. The clamping mechanism enables meat to pass through the blade quickly and efficiently without unsightly tearing, common in gravity meat slicers.

Beta Slicer 350 mm CODE: SLB0350

Power Requirements: 0.25 kW, 230 V, 50 Hz



Beta Slicer 350 mm

Equipment



Clip Machines

Max Packner Clipper

OUTSTANDING FEATURES:

- Easy to use and economical.
- Can clip 500 g, 1 kg and 3 kg products.

Max Packner Clipper	CODE: 6495225
Max Packner Clips	CODE: 6495201
Machine 711 (2000 Clips per box)	
Max Packner Clips	CODE: 6495200
Machine 713 (2000 Clips per box)	



Max Packner Clipper

Brine Pumps

Brine Pump Pressure 22 Litres

Supplied with a safety valve and automatic air release which works at maximum working pressure.

Bri	ne Pump Pressure 22 Litres	CODE: 8695253
Α	Brine Pump Needle	CODE: 2499134
В	Brine Pump Nut	CODE: 2499135

Brine Pump Electric Model 020C

- For large volume brine injection.
- Easy to clean no need to drain or prime unit.
- Compact pump cavity allows small batches of brine to
- Can also be used to inject bastings and marinades into meat portions.

Brine Pump Electrical Model 020C CODE: 8695254



Brine Pump Electric Model 020 C

Equipment



Heat Sealing Machines

Heat Sealing Machines

- Great for portion control when packing nuts, biltong, sweets etc.

 Adjustable timer to allow for various pages Easy to store 	us packet thicknesses.		
Heat Sealer Impulse 200 mm	CODE: 9007152		
Power Requirements: 0.26 kW, 230 V, 50 Hz			e ene

Heat Sealer Impulse 200 mm

Heat Sealer Impulse 300 mm

CODE: 2820976 Heat Sealer Impulse 300 mm

Power Requirements: 0.38 kW, 230 V, 50 Hz

CODE: 2820029 Heat Sealer Impulse 400 mm

Power Requirements: 0.52 kW, 230 V, 50 Hz

CODE: 2820798 Heat Sealer Impulse 500 mm

Power Requirements: 0.65 kW, 230 V, 50 Hz

Heat Sealer 600 mm Foot Operated

- 600 mm sealing bar.
- Adjustable thermostat for various micron bag sealing.

Heat Sealer 600 mm Foot Operated CODE: 2820974



Heat Sealer 600 mm Foot Operated

Wrapping Boards

Anvil Wrapping Boards

OUTSTANDING FEATURES:

- A failsafe wrapping machine with no wires, thermostats or fuses. The heating bar is a low wattage element which gives long life usage
- Water resistant, long lasting pad element
- Available in epoxy finish or stainless steel

Wrapping Board 500 mm S/S CODE: WMW1500

Wrapping Board 380 mm S/S CODE: 8650255

Power Requirements: 0.175 kW, 230 V, 50 Hz



Anvil 500 mm Wrapping Board

NOTE: Excludes plastic wrapping



Bandsaw Blades

Platinum Bandsaw Blades

Platinum quality bandsaw blades. The most advanced bandsaw blade available.

OUTSTANDING FEATURES:

- Tempering technology for hardened teeth
- Longer tooth and blade life
- High quality alloy steel
- Smooth cut and finish less bone dust
- Minimised wastage
- Safety and convenience of individually tied and boxed blades
- 5 Blades per box

Platinum Bandsaw Blade 112"	CODE: 6840090
Platinum Bandsaw Blade 112,5"	CODE: 6840091
Platinum Bandsaw Blade 113"	CODE: 6840092
Platinum Bandsaw Blade 116"	CODE: 6840093



Platinum Bandsaw Blades

Okto Supreme Bandsaw Blades

Okto Supreme Blades incorporate state-of-the-art technology and are exclusive to Crown National.

OUTSTANDING FEATURES:

- Precision ground and Impulse hardened teeth
- Thickness 0.022, fatigue resistant polished steel
- Stronger beam strength for straighter cutting
- Guaranteed welds
- Cutting is cooler, quicker, cleaner and the blades last longer
- Safety and convenience of individually tied and boxed blades
- 3 Blades per box

Okto Bandsaw Blade 112"	CODE: 6840008
Okto Bandsaw Blade 112,5"	CODE: 6840009
Okto Bandsaw Blade 113"	CODE: 6840010
Okto Bandsaw Blade 116"	CODE: 6840011
Okto Bandsaw Blade 117"	CODE: 6840012
Okto Bandsaw Blade 124"	CODE: 6840013
Okto Bandsaw Blade 126"	CODE: 6840014



Okto Bandsaw Blades

NOTE: Stainless Steel Scalloped blading available on request.



Bandsaw Blades

Powercut Range

A durable and economical, value-for-money bandsaw blade. Made from quality steel with 6 teeth per inch and individually wrapped.

Powercut Bandsaw Blade 112"	CODE: 6840070
Powercut Bandsaw Blade 112,5"	CODE: 6840071
Powercut Bandsaw Blade 113"	CODE: 6840072
Powercut Bandsaw Blade 116"	CODE: 6840073
Powercut Bandsaw Blade 124"	CODE: 6840075
Powercut Bandsaw Blade 126"	CODE: 6840076



Powercut Bandsaw Blades

Handsaws

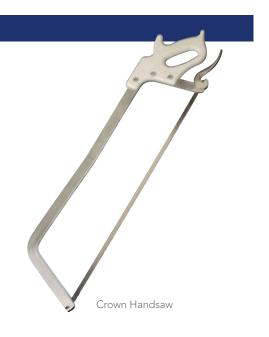
Crown Handsaws

The finest cutting instrument of its kind.

OUTSTANDING FEATURES:

- Comfortable contoured pistol grip stain free handle
- Exceptional balance makes for easier cutting
- Exclusive Kam-Lok feature makes changing of blades easier
- Precision engineered blade slot keeps blade firmly in position for straighter cuts
- Lever to maintain correct blade tension
- Longlasting stainless steel frames

Handsaw Complete 64 cm / 25"	CODE: 6802970
Handsaw Blade 64 cm / 25"	CODE: 6802971
Handsaw Handle 25" (SS)	CODE: 6802984





Butcher Knives

Swibo Professional

The Swibo Professional Range of butcher knives are precision crafted in Switzerland by the world famous Wenger Manufacturing Company which was established in 1893. Swibo knives were the first butchers' knives to introduce the synthetic, ergonomic handle sealed into the blade for improved safety and hygiene.

OUTSTANDING FEATURES:

- The perfected professional knife for butchers
- The famous bright yellow, synthetic handle has an ergonomic shape, and is injection moulded and sealed directly onto the polished, highgrade stainless steel blade
- Sets a new standard in knife safety and hygiene
- The handle is comfortable, non-slip, with no micropores or microcracks, dishwasher safe and sterilisable
- Its dedicated functions and design is engineered to deliver superior cutting strength
- The knife of choice among specialists

A Boning Knife 6"	CODE: 7030300		A
B Narrow Boning Knife 6"	CODE: 7030301		
C Boning Knife 7"	CODE: 7030309		В
D Skinning Knife 7"	CODE: 7030302	-	C C
E Steak Knife 8"	CODE: 7030303		
F Steak Knife 10"	CODE: 7030304		D D
G Steak Knife 12"	CODE: 7030305	. 1	E
H Butcher Knife 8"	CODE: 7030307	-	
Butcher Knife 10"	CODE: 7030308		F
	,	#F	G G
		RP V	— н





Butcher Knives

Arcos

Arcos Hermanos have always strived for the constant improvement of quality in all its products. Their highly specialised and well trained team of professionals constantly strive to improve their manufacturing processes and techniques in order to achieve the highest output and control with the highest quality standards.

OUTSTANDING FEATURES:

- The 2900 series is specially designed and engineered for prolonged and heavy use.
- Exclusive, high usable and lasting Nitrum® stainless steel.
- ERGONOMIC HANDLE: Safe and comfortable, the handle is made from injected polypropylene (PP).
 It is shock and slip resistant, as well as resistant to high temperatures (120 130° C).
- The join between handle and blade is seamless thanks to the injection process.

Arcos knives come in a variety of coloured handles:





3 mm

6 mm

8 mm

13 mm

20 mm

25 mm

4.5 mm

Mincer Knives and Plates

Self Sharpening Toplife knives with hard, wear resistant cutting blades of suitable stainless tool steel, brazed to a tough stainless steel knife body.

As the self sharpening cutting blade wears down it retains its thickness; the cutting pressure required remains constant and the blade remains sharp. As the conventional cutting blade wears down, the contact edge increases in width and additional cutting pressure must be applied unless resharpening and reshaping of the blade is undertaken.

The knife body ridge supporting the cutting blade wears down quicker than the blade when the knife reaches close to the end of its life and minimum if any resharpening is required. Resharpening and reshaping of the blades is required to restore the effective cutting properties of the knife.

MINCER KNIVES:

- Carbon alloy steel knives for economicical performance.
- Self sharpening stainless steel body tipped with hardened stainless steel inserts for top life.

MINCER PLATES:

- High hardness alloy steel for economical performance.
- High hardness stainless tool steel plates for top life.





MINCER KNIVES

- # 10 Econocut # 22 Econocut
- #32 Econocut
- # 52 Econocut
- # 56 Econocut # 32 Toplife
- # 52 Toplife
- # 56 Toplife
- # 52 Bonex

MINCER PLATES

- # 10 Econocut 4.5 mm # 22 Econocut 3.0 mm # 22 Econocut 4.5 mm # 22 Econocut 6.0 mm # 22 Econocut 8.0 mm
- # 22 Econocut 13.0 mm # 22 Econocut 20.0 mm # 32 Econocut 3.0 mm
- # 32 Econocut 4.5 mm # 32 Econocut 6.0 mm
- # 32 Econocut 8.0 mm # 32 Econocut 13.0 mm
- # 32 Econocut 20.0 mm # 32 Econocut Kidney
- # 32 Toplife 3.0 mm # 32 Toplife 4.5 mm
- # 32 Toplife 6.0 mm # 32 Toplife 3.0 mm
- # 32 Toplife 13.0 mm

- # 32 Toplife 20.0 mm
- # 32 Toplife Kidney # 52 Econocut 3.0 mm
- # 52 Econocut 4.5 mm # 52 Econocut 6.0 mm
- # 52 Econocut 8.0 mm # 52 Econocut 13.0 mm # 52 Econocut 20.0 mm
- # 52 Econocut 25.0 mm # 52 Econocut Kidney
- # 52 Toplife 3.0 mm # 52 Toplife 4.5 mm # 52 Toplife 6.0 mm
- # 52 Toplife 8.0 mm # 52 Toplife 13.0 mm # 52 Toplife 20.0 mm
- # 52 Toplife 25.0 mm # 52 Toplife Kidney # 52 Toplife Bonex 3.0 mm

- # 52 Toplife Bonex 4.5 mm
- # 52 Toplife Bonex 6.0 mm
- # 56 Econocut 3.0 mm # 56 Econocut 4.5 mm
- # 56 Econocut 6.0 mm # 56 Econocut 8.0 mm
- # 56 Econocut 13.0 mm
- # 56 Econocut 20.0 mm # 56 Econocut 25.0 mm
- # 56 Econocut Kidney # 56 Toplife 3.0 mm
- # 56 Toplife 4.5 mm # 56 Toplife 6.0 mm
- # 56 Toplife 8.0 mm # 56 Toplife 13.0 mm
- # 56 Toplife 20.0 mm # 56 Toplife 25.0 mm
- # 56 Toplife Kidney



Knife Sharpener

AccuSharp Knife and Tool Sharpener

An easy to use, convenient knife sharpener. Long lasting. With a Diamond Honed Tungsten Carbide sharpening edge for years of reliable use. Rust proof with safety handle. Ideal for use by butchers, chefs, housewives and hunters. Reversable replacement blades available.

AccuSharp Replacement Blades CODE: 2821018

Dimensions: 645 x 95 x 390 mm (WxDxH)



AccuSharp Knife and Tool Sharpener

Insect Exterminator

Insect Exterminator

OUTSTANDING FEATURES:

- Recommended for indoor use only
- Ideal for butcheries, fast food outlets and any place where food is prepared
- On/Off switch

Insect Exterminator 2 x 20 W CODE: 8659186

645 mm x 95 mm x 390 mm (WxDxH)



Product May Vary From Image

Stainless Steel Sausage Tables

OUTSTANDING FEATURES:

- Quality of steel
- Robust design
- Adjustable feet to level table
- Shelves and cutting boards (optional)
- Mild steel or stainless steel legs (optional)

Sausage Tables

Sausage Tables S/Legs	CODE: 1044725
1050 mm x 680 mm x 900 mm	
Sausage Tables S/Legs	CODE: 1044681
1650 mm x 680 mm x 900 mm	
Sausage Tables S/Legs	CODE: 1044673
0050 /00 000	

2250 mm x 680 mm x 900 mm



Sausage Table



Stainless Steel Tables

Stainless Steel Tables with Splashback

Table with Splashback S/S	CODE: 1044733
1050 mm x 650 mm x 900 mm	
Table with Splashback S/S	CODE: 1044744
1650 mm x 650 mm x 900 mm	
Table with Splashback S/S	CODE: 1044751
2250 mm x 650 mm x 900 mm	



Stainless Steel Tables without Splashback

Table without Splashback S/S	CODE: 1044763
1050 mm x 750 mm x 900 mm	
Table without Splashback S/S	CODE: 1044762
1650 mm x 750 mm x 900 mm	
Table without Splashback S/S	CODE: 1044138
2250 mm x 750 mm x 900 mm	



Table without Splashback

Stainless Steel Tables with Splashback and **Cutting Board**

Table with Cutting Board S/S	CODE: 1044741
1050 mm x 650 mm x 900 mm	
Table with Cutting Board S/S	CODE: 1044745
1050 mm x 650 mm x 900 mm	
Table with Cutting Board S/S	CODE: 1044752
1050 mm x 650 mm x 900 mm	



Table with Splashback and Cutting Board

NOTE: Fitted shelves are available in Stainlees Steel or Galvanised Metal.





Mixing Trough

Mixing Troughs

OUTSTANDING FEATURES:

- A stainlees steel construction
- Robust design
- On/off tap for ease of cleaning
- Wheels for manoeuvrability

Mixing Trough 200 Litre Highboy CODE: 8693353



Highboy

Trolley

Stainless Steel Trolleys with Wheels

Two Tier Stainless Steel Trolley CODE: 2821559

Three Tier Stainless Steel Trolley CODE: 9023013



Butcher Block

PVC / Metal Butcher Block

OUTSTANDING FEATURES:

- The PVC top is ideal in areas where the health department does not allow wooden chopping blocks.
- This item complies with all health department regulation.

CODE: 8628150

• Robust design



PVC/Metal Butcher Block

PVC/Metal Butcher Block

Dimensions: 610 x 610 x 900 mm (LxBxH)

50 cm Thick PVC Block



Knife Steels

Eggington Steel

OUTSTANDING FEATURES:

- Wooden handle available in both coarse and fine cut.
- High quality English steel for use with all the fine knives.

Eggington Coarse 360 mm CODE: 7015259

Grunter Steel

OUTSTANDING FEATURES:

• Economic range of Sharpening Steels, for general purpose use.

Grunter 350 mm CODE: 7015017



Hooks

ght S Hooks 100 mm (4") CODE: 8201402
er dozen
ght S Hooks 150 mm (6") CODE: 8207445
er dozen
ght S Hooks 200 mm (8") CODE: 8207485
er dozen
wivel Hooks 250 mm (10") CODE: 8207518
er dozen
iltong Hooks - Steel CODE: 8207526
er 1000
iltong Hooks Nylon CODE: 8207530
er 100



Display Trays and Units

Carlisle Display Trays

OUTSTANDING FEATURES:

- Can withstand temperatures from -220° C to 100° C
- Resistant to food acids and oils
- Solid or notched lids (optional)
- Snap-on lids provide superior leak resistance
- Dishwasher safe
- Very effective for merchandising and displaying food
- Clear lids available to fit all polycarbonate display trays
- Not suitable for steam use

Foodpans Full Tray

Black Polycarbonate 65 mm Deep CODE: INF5065

Dimensions: 530 x 532 mm (LxW)

Black Polycarbonate 100 mm Deep CODE: INF5100

Dimensions: 530 x 532 mm (LxW)



Full Tray Foodpan

Foodpans Full Lid Dome

Food Pan Insert CL Full Lid Dome CODE: INF4005

Dimensions: 530 x 532 mm (LxW)

Foodpans Half Tray

Black Polycarbonate 65 mm Deep CODE: INH5065

Dimensions: 325 x 265 mm (LxW)

Black Polycarbonate 100 mm Deep CODE: INH5100

Dimensions: 325 x 265 mm (LxW)



Half Tray Foodpan

Foodpans Half Lid Dome

Food Pan Insert CL Half Lid Dome CODE: INH4005

Dimensions: 530 x 532 mm (LxW)

NOTE: Displayware and Tongs available on request



Display Trays and Units

Carlisle Step Riser Display Units

OUTSTANDING FEATURES:

- For use in fridges or on buffets.
- Excellent presentation.
- ABS Plastic is durable, easy to clean and will not warp or chip.
- Edges have air slots for increased air circulation in refrigeration.

Black Two Step Riser CODE: SRA0002

Dimensions: 750 x 600 x 95 mm (LxWxH)

Black Three Step Riser CODE: SRA0003

Dimensions: 750 x 600 x 95 mm (LxWxH)



Black Three Step Riser

Nozzles

Nylon and Aluminium Nozzles

Treesede Filler Namela Niviana 10 mans	CODE	7004000
Trespade Filler Nozzle Nylon 10 mm	CODE:	7806809
Trespade Filler Nozzle Nylon 20 mm	CODE:	7806817
Trespade Filler Nozzle Nylon 30 mm	CODE:	7806736
Sausage Filler Nozzle Nylon	CODE:	7806736
Sausage Filler Nozzle Aluminium 12 mm	CODE:	7806821
Sausage Filler Nozzle Aluminium 20 mm	CODE:	7806819



Scoops

Aluminium Scoops	
160 mm	CODE: 7807024
250 mm	CODE: 7807025
265 mm	CODE: 7807023
305 mm	CODE: 7806612





Meat Mallet and Scraper

Meat Mallet Tenderiser (Med) CODE: 8695002 Meat Scraper Bone Dust CODE: 7806574



Thermometers

Pocket Dial 130 mm CODE: THP0130

-30° C to +30° C

Electronic 120 mm CODE: THE0120

-50° C to +150° C

CODE: 8201045 Testo 805

The infrared thermometer in mini format -25° C to +50° C

CODE: 8201047 Testo 831

Infrared thermometer for distance measurements -30° C to +210° C

NOTE: Additional models available on request

Pocket Dial 130 mm Testo 831 Electronic 120 mm

Testo 805

Patty Discs

Hamburger Cellophane Discs	CODE: 6495435
100 mm round	
Hamburger Cellophane Discs	CODE: 6495443
130 mm round	
Hamburger Waxed Discs	CODE: 6495439
125 mm square	
Hamburger Waxed Discs	CODE: PWO0020
113 mm x 113 mm square	





Plastic Trays and Bins

Plastic Trays and Bins

Small Tray A165	CODE: 8209677
490 x 340 x 130 mm	
Medium Tray A164	CODE: 8209685
650 x 380 x 200 mm	
Large Tray A101	CODE: 8209650
820 x 460 x 270 mm	
White Food Bin	CODE: 8205604
Black Refuse Bin	CODE: IBP1085



Cleaning Chemicals

Bacterex C

A superb product that disinfecs while it cleans away the most stubborn dirt. Hygienic and easy to use on floors, walls, preparation surfaces, utensils and equipment. Available in convenient 30 g sachets. 1 sachet to 10 litres of water.

500 x 30 g Sachets



Sewersolv

A concentrated superstrong cleaner for sewers, drains and grease traps. Quickly dissolves the most stubborn fats and greases. Power cleaning at its best.

Sewersolv	CODE: 8206335
-----------	---------------

5 kg Bucket





Poly Clips

Single Clip Applications (i.e. SCH and SCD Clippers)

250 g 55 mm flat width S628 500 g 65 mm flat width S628

 1 kg
 130 mm flat width
 \$632, \$638, \$735

 2 kg
 150 mm flat width
 \$638, \$735, \$740

2½ - 3 kg 165 mm flat width \$740

Reel Clip Applications (i.e. Automatic FCA Clippers)

250 g 55 mm flat width 15/07

500 g 65 mm flat width 15/07, 15/08, 18/0 1 kg 130 mm flat width 15/09, 15/10, 18/09, 18/10

2 kg 150 mm flat width 15/10, 18/10 2½ - 3 kg 165 mm flat width 15/11, 18/10, 18/11



Cutting Boards

White Cutting Board	CODE: 8206540	
500 x 380 x 12 mm		
White Cutting Board	CODE: 8206552	
600 x 450 x 12 mm		
White Cutting Board	CODE: 8206538	9
460 x 900 x 20 mm		
White Cutting Board	CODE: 8206490	
440 x 290 x 12 mm		
White Cutting Board	CODE: CBP0610	

HACCP Colours Available

Meat Netting

610 x 610 x 50 mm

Netting 16 Square	CODE: 6455298
Netting 18 Square	CODE: 6455344
Netting 20 Square	CODE: 6455425
Netting 22 Square	CODE: 6455514
Netting 24 Square	CODE: 6455603





Skewers

Bamboo Skewers	CODE: 8214040
3 mm x 20 cm (8")	250 per pack
Bamboo Skewers	CODE: 8214008
4 mm x 18 cm (7")	250 per pack
Bamboo Skewers	CODE: 8214011
4 mm x 35 cm (14")	250 per pack
Bamboo Skewers	CODE: 8214007
5 mm x 20 cm (8")	250 per pack
Bamboo Skewers	CODE: 82140110
5 mm x 45 cm (18")	250 per pack



Espetada Sticks

Espetada Stick	CODE: 8214004	
370 mm Mild Steel with Woo 12 per pack	oden Handle	
Sosatie Stick	CODE: 8214003	
260 mm Mild Steel with Woo 12 per pack	oden Handle	

Twines

Cotton Twine #104	CODE: 6490107
185 m Long	
Cotton Twine #304	CODE: 6490158
185 m Long	
Tuf Tape (for rolled beef)	CODE: 6490093
200 mm	
Tuf Tape (for rolled beef)	CODE: 6490095
500 mm	

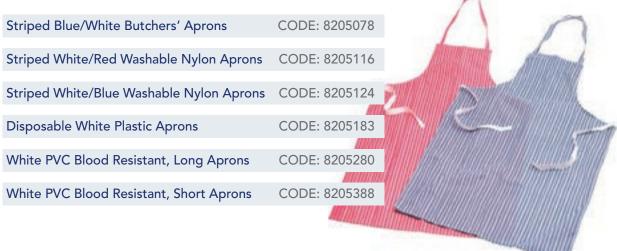




Clothing

Gumboots		
Calf Length (Ladies)	CODE: N/A	8
Sizes 4 to 11		
Knee Length (Mens)	CODE: N/A	
Sizes 6 to 12 Water Shoes		
		A THE STATE OF THE
Calf Length (Ladies)	CODE: N/A	
Various Sizes		

Aprons



Miscellaneous

Dust Coats (Various Sizes)	CODE: N/A
Beard Masks	CODE: 8206144
Mop Caps	CODE: 8206142

Spares



HENKOVAC CROWN VAC	CODE: 8646016
Henovac Teflon Double Seal	CODE: 2492180
Henovac Convex Seal Wr 110900020	CODE: 2492087
Henovac Lid Seal 120505130	CODE: 2490047
BANDSAW OKTO MKI-VB NEW TYPE	CODE: 84024980
Bandsaw Fibre Guide	CODE: 2815761
Bandsaw Screw Special *818	CODE: 2816148
Bandsaw Lower Metal Guide	CODE: 2815788
Bandsaw Metal Guide Screw	CODE: 2816377
Bandsaw Mk3 Upper Bld Gdebl 20X25	CODE: 2814072
Bandsaw Scraper Locking Screw	CODE: 2815338
	CODE: 2814099
Bandsaw Mk5 Blade Scraper 10B	
Bandsaw Mk5 Wheel Scraper 12	CODE: 28141020
MINCER #52 OKTO MKII 3PH 5.5 KW	CODE: 8630039
Mincer #52 Front Stud	CODE: 2816100
Mincer #52 Floor Worm Assy	CODE: 2822350
Mincer #52 Floor Stomper Thin	CODE: 2822459
Mincer #52 Ring Nut 9106	CODE: 2822342
Mincer #52 Crown Barrel 9104	CODE: 2822334
EULED TALCA OVIT DA	2005 2040047
FILLER TALSA 26LT PA	CODE: 9042067
Talsa Piston Seal 26L-39	CODE: 2495252
Talsa Lid Seal 26L P 6231	CODE: 2495236
Talsa Lid Bolt 26L 7021	CODE: 2812012
Talsa Nozzle Nut 7048	CODE: 2812007
Talsa Nozzle 12 mm-4	CODE: 2812005
Talsa Nozzle 20 mm-4	CODE: 2812004
Talsa Nozzle 30 mm-4	CODE: 2812006
TOR-REY TENDERISER MODEL MT-43	CODE: 8431162
Tor-rey Tenderiser Blade Shaft Front	CODE: 2821412
Tor-rey Tenderiser Blade Shaft Rear	CODE: 2821413
Tor-rey Tenderiser Knife Scraper 05-02217	CODE: 2821414
Tor-rey Tenderiser Helical Gear/05-02217	CODE: 2821415
	CODE: 2821416
Tor-rey Tenderiser Bush Left 0573040	
Tor-rey Tenderiser Bush Right 0573041	CODE: 2821417
BILTONG CABINET S/S WITH GLASS	CODE: 8624005
Biltong Cabinet Germic Globe	CODE: 2831651
Biltong Cabinet Germic Globe	CODE: 2831767
Biltong Cabinet Hinge Biltong Cabinet Element 1250	CODE: XBCB0002
Biltong Cabinet Element 1250 Biltong Cabinet 1250 Fan Motor	CODE: XBCB0002
Billong Cabinet 1250 Fan Motor	CODE. ABCBUUU4
WRAP MACHINE 380 MM S/S CROWN	CODE: 8650255
Wrapmaster Mica Plate Element	CODE: XWMW0006
Wrapping Board 380 mm Element	CODE: XWMW0001
Wrapmaster Rocker Switch	CODE: XWMW0002
1	



Frequently Asked Questions...

1. How to remove and clean the upper wheel on an Okto Bandsaw?

- Switch unit off at the wall.
- Loosen tension knob and remove.
- Remove blade from the wheel.
- Remove wheel and wipe clean with Bacterex diluted in a warm water solution.
- Use a damp disposable wype all cloth to clean unit. Do not submerge wheel in water or use a wet cloth.
- Rinse thoroughly and refit, ensuring that the blade is not over / under tensioned.
- The tension marker must be in the centre of the yoke marker.
- This process should be carried out daily.

2. How to remove and clean the barrel on an Okto #52 Mincer?

- Switch unit off at the wall.
- Remove lock-ring with spanner supplied, and then proceed to remove the plate, knife and worm
- Using a size 18mm spanner slowly remove the two bolts on either side of the barrel.
- Remove the barrel slowly without damaging the threads on the mincer.
- Use a damp disposable wype all cloth with Bacterex diluted in a warm water solution to clean the mincer flange section.
- The barrel, lock-ring, plate, knife and worm are to be wiped down with the same solution. Ensure that the unit is rinsed thoroughly with clean warm
- Refit barrel and tighten barrel bolts.
- Refit worm, knife, plate and lock-ring (tension lock-ring by hand only).
- Suggested cleaning 2 3 times per week.

3. How to remove and clean the piston from a Talsa filler.

- Open lid 180 degrees.
- Lift piston to the top of the cylinder.
- Insert both wrench pins into the piston bolt cavities and turn anti clockwise.
- Remove piston and turn threaded section of wrench slowly into the piston (the wrench will slowly lift the piston from the barrel).
- Remove wrench from piston.
- Use a damp disposable wype all cloth with Bacterex diluted in a warm water solution to clean the inside barrel section.
- Remove piston seals from the piston and clean individually.
- Refit piston seals on piston and lubricate the piston and barrel with vegetable oil.
- Slowly press the piston into the barrel.
- Tighten piston bolt with wrench in a clockwise direction.
- Lower piston 3 cm into barrel and then lift back up to full position.
- Tighten piston bolt with spanner.
- Repeat this process until the piston bolt is securely fitted.
- Suggested cleaning 2 3 times per week.

4. Seal and counter beam maintenance on Henkovac vacuum machines

The seal beams and counter beams must be in good condition for good sealing of the packing.

- Clean the seal and counter beams every day with a dry cloth
- Check the condition of the teflon tape and the sealing wires every day.
- Replace the tape if it is damaged.
- Replace the sealing wire if there are any kinks in it.
- Check the condition of the silicon rubber in the counter beam every day.
- Replace the rubber if it is burnt.

SLICER BLADE REMOVAL









The unique Safe Blade Removal System of the Deluxe Slicer models allows for quick and safe removal of the blade during slicer cleaning, allowing multiple product processing with very little down time.

www.crownnational.co.za

Head Office

31 Nguni Drive, Longmeadow West Modderfontein, 2064, Johannesburg

Tel: +27 11 201-9000 Fax: +27 11 201-9180

e-mail: info@crownnational.co.za

Eastern Cape Region

11 North Road, North End, Port Elizabeth, 6001

Tel: +27 41 484-3221 Fax: +27 41 484-1949

e-mail: pe@crownnational.co.za

Free State Region

Shop 9, Megapark, Curie Avenue, Bloemfontein, 9301

Tel: +27 51 430-0240 Fax: +27 51 430-0250

e-mail: blm@crownnational.co.za

KwaZulu-Natal Region

95 Intersite Avenue, Umgeni Business Park, Durban, 4001 P.O. Box 74310, Rochdale Park, 4034

Tel: +27 31 263-0533 Fax: +27 31 263-0543

e-mail: dbn@crownnational.co.za

Mpumalanga Region

31 Waterfall Avenue, Riverside Industrial Park,

Nelspruit, 1200 Tel: +27 13 752-2040 Fax: +27 13 752-7986

e-mail: nel@crownnational.co.za

Northern Region

31 Nguni Drive, Longmeadow West Modderfontein, 2064, Johannesburg

Tel: +27 11 201-9000 Fax: +27 11 201-9180

e-mail: jhb@crownnational.co.za

Western Cape Region

4 Pepper Place, Rainbow Park Phase II Montague Gardens, 7441

Tel: +27 21 527-6100 Fax: +27 21 527-6129

e-mail: ct@crownnational.co.za

