

3.5.2.3.3 Ceilings shall be regularly cleaned. Accumulation of dust above the ceiling shall be not allowed. During periods of operation, the floors and the drainage channels in the preparation, processing and packaging areas shall be kept clean and if necessary by regular sweeping and flushing with water. The product shall be protected from being splashed with water. Refuse shall not be permitted to accumulate in drainage channels. Thorough cleaning of floors and drainage channels shall take place as often as is necessary and at the end of each day's operations in order to maintain hygienic conditions.

3.5.2.3.4 Foot-baths shall be drained and cleaned regularly and the disinfectant kept in active condition.

3.5.2.3.5 The inside surfaces of walls of preparation, processing and packaging areas shall be thoroughly washed immediately after each day's operations and as often as necessary during the production periods. The rooms shall be kept as free from dust as possible.

3.5.3 Control of vermin

All buildings in which raw materials, ingredients and the product are stored, or in which the product is handled, prepared, processed or packaged, shall be kept free from insects, rodents, birds and other vermin. The factory and its premises shall be regularly inspected by trained personnel for the evidence of infestation by insects or rodents and for the presence of birds and wild or domestic animals. All rooms where raw materials and ingredients are stored shall, in addition, be rodent proof. Potential breeding sites shall be eliminated.

An effective and continuous programme for pest control shall be established, implemented and maintained.

A site drawing and register of all bait stations shall be kept up to date and open baits shall not be present in processing areas or ingredient, product and empty container and lid stores.

NOTE SANS 10133 (SABS 0133), *The application of pesticides in food handling, food processing and catering establishments*, may be referred to.

3.5.4 Exclusion of animals

Animals, including birds, shall be not allowed in any part of the factory. Security dogs shall be not allowed in, or come in contact with production or product handling areas or product contact surfaces.

3.6 Requirements for employees engaged in the handling, preparation, processing, packaging and storage of the product

3.6.1 Operating requirement

The production planning shall be such that workers will not be subjected to such exhausting long working hours that could result in a lack of their concentration with the risk of adversely affecting the product quality and safety.

3.6.2 Health

3.6.2.1 Before being engaged, employees shall pass an appropriate medical examination to ensure that they are free from communicable diseases, and shall thereafter pass an annual medical examination.

3.6.2.2 No person who is a carrier of, or is suffering from, any communicable disease, especially a carrier of *Salmonella*, *Shigella* and A-type haemolytic *Streptococcae*; or parasites such as any vegetative or cystic amoeba, tape-worm or any type of helminthiasis, or shows symptoms of, or is suffering from, gastro-enteritis or an enterobacterial infection or a disorder or condition causing discharge of fluid from any part of the skin or body, shall be allowed to come into contact with the product, containers or product contact surfaces. Any such person or worker in the factory in a capacity in that there is a possibility of the product or ingredients becoming contaminated or the disease being transmitted to other individuals, shall immediately report to the factory management.

3.6.2.3 The management shall ensure that no employee who is known or suspected to be affected with a disease capable of being transmitted through food shall be permitted to work in any part of the factory in a capacity in which there is a possibility of the employee's contaminating the product with pathogenic organisms.

3.6.2.4 In the case of any absence of more than one day due to illness, the employee shall, before resuming duty, report the nature of the illness that necessitated the absence to the factory hygiene officer who shall, should he deem it necessary, take the appropriate steps to obtain a medical opinion on the employee's fitness for work.

3.6.2.5 An appropriate medical record of each employee shall be kept. Medical records and any medical certificate submitted by a factory employee shall be available for inspection by the authority administering this specification.

3.6.2.6 The management shall ensure that no employee who is suffering from any cut, injury, infected wounds, infected skin irritations, shall be allowed to come into contact with the product, ingredients, containers, or product contact surfaces, unless the cut or injury has been so treated or dressed that the discharge of body fluid has been prevented, and the wound and its dressing have been so covered as to ensure that infection or contamination of the product is no longer possible. Such dressing and its covering shall be conspicuous in colour.

3.6.2.7 Employees performing close-up inspections shall undergo an eyesight test at least annually.

3.6.2.8 All the requirements of Regulation 2538 of the Health Act, 1977, shall be complied with.

3.6.3 Protective clothing

3.6.3.1 All employees engaged in the handling, preparation and processing of the product up to and including the cooling of cans after retorting, but excluding employees operating within freezer storage rooms, shall wear clean, light-coloured, protective clothing covering personal clothes down to the knee. They shall in addition wear washable or disposable headgear that completely covers their hair including beards and if necessary, hair nets. Employees handling the exposed product or other wet materials shall wear light-coloured waterproof aprons.

3.6.3.2 Gloves if used, shall be made from impermeable material and shall either be washable or be of the disposable type. The wearing of gloves shall not exempt workers from washing their hands.

Woollen caps may be worn in freezer rooms only. Overalls shall completely cover the personal clothing of the employees. At the end of each working day soiled overalls and headgear shall be handed in for laundering.

3.6.3.3 Employees shall not remove protective clothing from the factory premises.

3.6.3.4 Sleeves shall not extend below the elbows, except when covered by plastics sleevelets or when worn in freezer storage rooms.

3.6.3.5 Protective clothing, other than waterproof aprons, sleevelets and gloves, shall not be stored in work areas; when not in use it shall be kept in change-rooms and shall not be removed from the premises except for laundering under hygienic conditions. The homes of employees shall not be regarded as acceptable for laundry purposes.

3.6.3.6 Waterproof protective clothing shall be made of plastic, rubber or other acceptable material. All protective clothing shall be of hygienic design, shall not have external pockets above the waistline, shall be in good repair and shall not constitute a source of contamination to the product.

3.6.3.7 Employees shall not visit the toilets and cloakrooms with their waterproof aprons, gloves and plastic sleevelets on. Hooks and pegs for hanging waterproof aprons and gloves shall be provided at the exit before the hand-wash facilities. Pegs for gloves shall not be located above other protective clothing in such a way that contamination by means of dripping water can occur. Hooks for aprons shall be adequately spaced apart to prevent contact between aprons and a consequent build-up of contaminants.

3.6.3.8 Waterproof aprons, sleevelets and gloves shall be cleaned and disinfected immediately at the end of each shift and at the end of each days' operations, at each time of undress and as frequently as necessary, and shall be hung on hooks or pegs at exits from work areas during intervals between work and during visits to the lavatory. Waterproof protective clothing such as aprons shall not be washed on the floors. Waterproof aprons, sleevelets and gloves, as well as equipment used in the preparation, processing and packaging of the product, shall be not removed from the work areas except for repairs and for cleaning under hygienic conditions.

3.6.4 Personal hygiene and personal effects

3.6.4.1 Workers shall, at all times be clean of person and maintain a high degree of personal cleanliness and conform to hygienic practices while on duty. Workers shall be trained and educated in personal cleanliness and hygienic practices. Adequate control shall be exercised to ensure that employees are in compliance with the hygienic requirements such as supervision at the hand-washing facilities before commencing work at the beginning of a work shift and after breaks.

3.6.4.2 Before commencing work, and after each absence from the factory preparation, processing or packaging area, after blowing their noses, after handling unwashed vegetables, at regular intervals during production, or at any time necessary such as after handling contaminated material, and after using the toilet, employees shall wash their hands with warm running water complying with 3.4.1, and an acceptable unscented liquid soap or detergent, after which they shall rinse their hands in clean, running, potable water complying with 3.4.1. They may then immerse their hands in an acceptable disinfectant, after that they shall rinse their hands in clean running potable water, complying with 3.4.1, if so required by the usage directions of the hand dip. Fingernails, shall be kept short and clean and free from varnish or lacquer. Jewellery shall not be worn by employees who handle raw materials or the unprotected product.

3.6.4.3 The necessary precautions and control shall be exercised to prevent contamination through the workers of the product with micro-organisms and foreign substances including but not limited to, perspiration, hair, cosmetics, chemicals and medicants or any behaviour that could result in the contamination of the product. Workers handling the unprotected product shall keep their hands away from their noses, eyes, ears, hair, mouths or licking their fingers when handling the unprotected product. Workers shall not cough, sneeze or blow their noses over the unprotected product.

3.6.4.4 Containers used in the preparation, processing or packaging of the product shall be not used for any other purpose.

3.6.4.5 The use of chewing gum and tobacco in any form shall be not allowed within the areas where the product and its ingredients and packaging materials are handled or stored. Spitting shall be not allowed anywhere within the factory premises.

3.6.4.6 Neither workers' personal effects nor their food shall be present in the preparation, production, processing, packaging areas or where the product, its ingredients or packaging materials are handled or stored. Employees' personal effects including their personal clothes shall be kept in lockers or hangers provided for this purpose in cloakrooms. No food or drink, other than that forming part of the product produced, shall be prepared and no food or drink shall be consumed in these areas.

3.6.5 Notice boards and supervision

Notices prohibiting eating, spitting and the use of chewing gum and tobacco in any form shall be posted in each production area and in each area for the storage of ingredients. Notices requesting employees to wash their hands on entering the production areas shall be posted at each entrance used by employees to gain access to those areas. Notices shall be posted at the toilets directing employees to wash their hands after using the toilet. (See 3.2.9.1(d).)

Adequate supervision shall at all times be practised to ensure compliance with this section.

Responsibility for ensuring observance of all personal practices, operations and requirements of this section by all people and employees shall be given specifically to competent staff members.

3.6.6 Visitors

A strict control of visitors entering the factory shall be exercised.

Any person who visits or enters the preparation, processing or packaging areas during the hours of operation shall, when in those areas, observe and adhere to all relevant hygiene requirements and shall wear clean protective clothing that shall be provided by the factory.

4 Ingredient requirements

4.1 General

All ingredients used shall fall within the scope of, and shall comply with the requirements of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act 54 of 1972) (as amended from time to time) and any regulation promulgated there-under. The limits set for the use of ingredients by the regulations in the said Food, Cosmetics and Disinfectant Act shall be adhered to. All ingredients used in the preparation of the product shall be clean, sound, of good quality, shall show no signs of decomposition or shall not be contaminated or excessively infested with parasites or be infested with insects, and shall be in every way fit for human consumption. In addition the product shall not contain any substance in amounts that may present a hazard to human health.

4.2 Condition of ingredients

All fish, marine molluscs, crustaceans and other ingredients for canning, whether fresh, chilled, frozen, canned or otherwise preserved shall be in compliance with 4.1. All fish, marine molluscs and crustaceans shall be alive on harvesting. The raw materials shall only be transported under protection.

An incoming inspection on the quality of the raw materials and ingredients shall be conducted on receipt and records shall be kept of the findings and time of reception.

Ingredients are to be inspected on arrival at the factory to ensure that they are correct as ordered, properly packaged and identified through labelling, of the correct quality or grade and uncontaminated. Ingredients are to be stored hygienically and in such a manner so as to protect quality and integrity. Where ingredients are made up for use in processing areas, they shall be protected and identified. Only ingredients made up for the daily use shall be stored in processing areas and then in such a manner that they cannot be contaminated. They shall be kept hygienically at a safe distance from the floor.

4.3 Specific requirements for certain ingredients

4.3.1 Packing oils and vegetable fats

Edible vegetable oils that shall not affect the product adversely and refined fish oil may be used in the canning of fish. The oils shall be bland, clear refined, deodorized, edible and free from rancidity, off-odour, and off-flavour. They shall be clear at a temperature of 15,5 °C and bland and, where applicable, shall comply with the requirements of the British Pharmacopoeia or the British Pharmaceutical Codex, or be in conformity with the recommended international standards adopted by the Codex Alimentarius Commission. Olive oils shall be in conformity with the Recommended International Standard for Olive Oil, Virgin and Refined and for Refined Olive Residue Oil (Ref. CAC/RS 33-1970). The use of mineral oils is not permitted.

Edible vegetable fats for use in the preparation of the product shall be bland and free from off-odours, off-flavours and rancidity.

4.3.2 Preservatives

Preservatives shall, when allowed, be specially prepared for use in foodstuffs.

4.3.3 Salt

Salt added to the product or used in the preparation of brine for canning shall be edible and free from bitterness due to calcium, magnesium, sulphur or other causes.

4.3.4 Starchy (farinaceous) materials

Subject to the provisions of the said Foodstuffs, Cosmetic and Disinfectants Act, fillers used shall be cereal, rusk, biscuit meal, potato flour, or other edible starchy (farinaceous) material, including edible gums and modified starches. Starchy materials used as thickeners in the preparation of sauce shall be cereal or other wholesome edible starchy flour and shall be free from insect infestation, pesticides or other contaminants.

4.3.5 Thickeners

Thickeners specially prepared for use in food and of sound quality may be used in the preparation of the packing medium.

4.3.6 Vegetables and fruits

Vegetables may be used as such or as preparations. Vegetables or fruits, whether frozen, canned, dehydrated or dried, shall be suitably prepared from fresh vegetables or fruits that are free from insect infestation or signs of insect infestation and contamination and that comply with the requirements for pesticidal residues under the said Foodstuffs, Cosmetics and Disinfectants Act. Canned vegetables shall comply with the relevant requirements for standard grade prescribed by the regulations under the Agriculture Product Standards Act, 1990 (Act 119 of 1990) (as amended from time to time).

The cleaning and washing of fresh vegetables or fruits shall be done in a room separated from areas where fish molluscs or crustaceans are handled or prepared to avoid risks of cross contamination of the product.

4.3.7 Tomato paste

Tomato paste shall be made only from sound, clean, fully ripe, red tomatoes that have been well washed and trimmed where necessary. Tomato paste shall have the maximum tomato content and shall be well-bodied, smooth and fine in texture and free from skin, seeds and core. It shall have a colour and flavour characteristic of fresh, sound and ripe tomatoes.

Scorched paste or paste showing evidence of the use of immature tomatoes, or paste containing artificial colouring matter shall not be used. Tomato paste intended for thickening by homogenizer before using in fish canning, shall be diluted to an appropriate total soluble solids content and homogenized to render a good sauce in the end product with a consistency corresponding to a blob diameter when tested in accordance with 11.11, not greater than 59,5 mm.

4.3.8 Soya and other proteinaceous materials from non-fish products

Subject to the requirements of the regulations under the said Foodstuffs, Cosmetics and Disinfectants Act and with the approval of the authority administering this specification, soya and other non-fish, proteinaceous materials may be used subject to the following:

- a) Soya and any other non-fish proteinaceous materials shall not be used to replace the required fish, molluscs and crustacean content.
- b) If required to do so by the authorities administering this specification, the manufacturer of the canned fish, canned molluscs or canned crustacean products shall disclose to the authority the composition of the non-fish proteinaceous preparation that has been used and the concentration at which it is present in the product.
- c) Where soya and/or other non-fish proteinaceous material is present in products that contain the fish or molluscs or crustacean content called for by this specification, the presence of non-fish proteinaceous material shall be declared in the ingredients panel of the label. (See 10.2.1(c).)

4.3.9 Canned and preserved fish for paste manufacture

Canned fish that fails to comply with the requirements of this specification shall not be used in the manufacture of fish paste except under the authority administering this specification.

Preserved fish used in the manufacture of fish paste shall be clean, sound, and free from contamination.

4.3.10 Sweetening ingredients

Only the type and quantity of sweetening ingredients permitted under regulations promulgated under the Foodstuffs, Cosmetics and Disinfectants Act may be used.

5 Requirements for fish, marine molluscs and crustaceans used as raw materials for the product

5.1 General

Good hygiene and good manufacturing practices are to be incorporated during the harvesting, transport, handling, cleaning, preparation and processing of the product. Operations such as gutting, heading, skinning, boning or portioning shall be done in a clean and hygienic area and under such conditions as will ensure freedom from any contamination, deterioration, spoilage or the development of infections or toxigenic micro-organisms. Where gutting is performed, it shall be done in such a manner that split viscera do not adversely affect the quality, appearance and flavour of the product. Guts and fish offal shall be hygienically and effectively removed from cleaned fish products by mechanical means, water fluming or other acceptable means. Fish shall be thoroughly washed in clean running water before and after cleaning and preparation.

5.2 Fish

5.2.1 All fish shall be acceptably descaled unless

- a) it is sardines packed in flat shallow cans, or
- b) the product is described as "scales on".

Tough scales, able to hurt the palate, on Jack Mackerel (Maasbanker) shall be removed.

5.2.2 The heads, tails, and fins of all fish shall be removed unless the fish is packed as whole units or the manner of presentation is appropriately described on the label.

5.2.3 The viscera (except for roes) kidney and extremity of the anal canal, shall be removed.

5.2.4 Large bones and backbones that can hurt the palate must be removed unless

- a) it is the backbone of larger species presented as cross-cut sections or cutlets, or
- b) fish bones are softened during heat processing or in low acid preservation to such an extent that there is no health risk to the consumer.

5.2.5 Fish products and its form and presentation shall be correctly described on the label.

5.3 Marine Molluscs

5.3.1 General

Molluscs are to be obtained from sources that are officially approved by the authorities monitoring biotoxins. Molluscs shall not contain any chemical, or microbiological contaminants or marine biotoxins at levels that could be detrimental to the health of the consumer. Molluscs shall be alive until immediately before processing and may be kept alive in appropriate clean water tanks or in aerated containers under cool conditions until they can be processed.

5.3.2 Shucking

Shucking shall be performed under conditions of good hygiene and the product thoroughly washed under clean running water. Shucking shall be complete and the product shall be free from sand, dirt, silt, debris and other foreign material.

5.3.3 Cleaning of abalone

In the case of abalone, all guts, mouths, adhering mucous and epithelium between fringes and the "foot" of the abalone shall be removed.

5.4 Crustaceans

5.4.1 General

Raw material used for canning shall be of a quality suitable for human consumption and shall be collected from clean waters not polluted by industrial or sewage discharges or other sources of pollution. Crustaceans shall not contain chemical, microbiological or biological contamination that may be hazardous to health. Transport of crustaceans to the factory shall be under conditions that will protect the product from the elements and from environmental contamination. Crustaceans shall be kept alive until immediately prior to processing or canning.

5.4.2 Preparation of crustaceans

Unless crustaceans are canned in the round, all viscera including the anal canal shall be removed. In flesh packs, the flesh shall be neatly trimmed and free from pieces of shell or swimmeret.

5.5 Minced, diced or sliced fish products

Proper procedures are to be instituted to prevent contamination of product with metal and other foreign material from mincers, slicers, dicers or other cutting machinery. Raw material used for the product must be fresh and of a quality suitable for human consumption.

6 Requirements for the product

6.1 General requirements

6.1.1 Packing appearance and colour

The product in a container shall comprise fish or molluscs or crustaceans or a mixture of these, of an appearance and colour characteristic of the genus or genera processed and packed in the manner indicated. The product shall have a normal texture characteristic of the species, the type of product and the process used.

6.1.2 Absence of foreign matter posing a threat to health

The product shall be free from any foreign material that poses a threat to human health, e.g.

- a) contaminants such as but not limited to pesticide residue, fuel, mineral oil and lubricants or hazardous chemicals, or
- b) dangerous material such as, but not limited to glass, metal, stones, sharp and hard bones.

6.1.3 Absence of toxic fish, biotoxins and histamine

No fish that are naturally toxic or affected by biotoxins from the aquatic environment or have high histamine levels may be used for canning. The product shall not contain more than 10 mg/100 g histamine based on the average of samples tested, provided that no sample shall contain more than 20 mg histamine per 100 g product. The limits for other biotoxic substances are as per United States Foods and Drugs Administration regulations.

6.1.4 Objectionable extraneous matter

The product shall be free from any objectionable extraneous material such as, but not limited to insects, sand, dirt, soiling, hair, metal soiling or other foreign matter that indicates non-compliance with good manufacturing and sanitation practises. The product shall be free from sulphide stains and presence of "struvite crystals".

6.1.5 Container integrity

The final product shall be free from container integrity defects that may compromise the hermetic seal. Additional requirements are stipulated in section 9.

6.1.6 Net headspace and fill of containers

The containers shall be filled to practical capacity without being overfilled. The drained mass requirements are subject to the cans being filled to practical capacity. When examined in accordance with 11.4.2 and 11.4.3, the net headspace in cylindrical containers shall be not more than 13 mm, on condition that the product shall occupy at least 90 % of the total volume capacity of the container.

Sufficient headspace shall be allowed for expansion of the contents during the heat process and to ensure that the ends of the container or closure of jars are not convex when cooled after the retort process. Shallow containers with large flexible lids (see definition 2.54) need little or no measurable headspace on condition that the lid or lids do not remain convex.

6.1.7 Negative air pressure inside containers

The negative air pressure inside the container shall be adequate to prevent the bulging or flipping of containers at ambient temperature or lower atmospheric pressure in regions of higher altitude.

6.1.8 Sensory requirements

The product shall have an odour and flavour that is characteristic of fresh raw material and of the packing medium and processing undergone. Examine the product as stipulated in 11.9.

6.1.9 Requirements for the packing medium

The product may be packed in its own juice, potable water, brine, vegetable broth, a sauce, a gravy, fish oil, vegetable oil, or with vegetable oil added, in agar, or other suitable medium. The product may be packed dry. The packing medium shall be reasonably free from exuded proteins and fish matter indicating decomposed fish or presence of viscera or of excessive fish blood in the raw material. Parchment paper or similar lining material may be used to prevent surface discolouration or adhesion of the product to the container. Vegetables may be used in the preparation of the sauce or gravy. When tested in accordance with 13.2 the sauce or gravy without the solid ingredients shall contain not more than 6 % starch. Where the product is claimed to be in a broth, or a thick or rich sauce or gravy, the character of the packing medium shall, after equilibrium has been reached, be in accordance with the claim made. A product packed in a natural broth shall not be labelled in a sauce or gravy.

Where oil is declared as the sole packing medium, the presence of other liquid shall be not in excess of 30 % when determined in accordance with 11.6. When the packing medium contains more than 30 % exuded liquid it shall be labelled "X (name of product) with oil added".

6.1.10 Vegetables, fruits and cereals

Root vegetables shall be in the form of clean-cut dices, slices or pieces, except that, if of acceptable size, these vegetables may be packed whole. Dices shall be approximate cubes. Pieces shall appear regular in size and shape and shall be practically free from scrap pieces. The texture shall be soft but not broken up or disintegrated or abnormally tough, dry or woody. Onions, fresh or pickled, shall be sliced, diced, shredded or chopped, or, if of acceptable size, they may be used whole. Dehydrated onion may be used. Grains of rice shall separate easily. Beans and peas shall be mostly intact and not split or broken, and shall be free from loose shells. Cereals such as spaghetti and noodles shall be not disintegrated or abnormally broken up, and the texture shall be not abnormally mushy or soggy.

6.1.11 Parasites

The product shall be free from visible parasites.

6.1.12 Salt content (as sodium chloride)

Unless described as packed in salt, or salted, or heavily salted the product, when examined in accordance with 13.3, the product shall contain not more than 3 % by mass of common salt.

6.2 Canned fish

6.2.1 General

Only fish of one species shall be packed under the same batch code and sub code where applicable. Units of fish in any one container shall be reasonably uniform in size, appearance and form. Where it is necessary to adjust the fill of the container, a small cutlet or smaller unit of fish may be present. The manner of packing or the cut packed shall be in accordance with the product description on the label. In packs other than plain packs, the fish shall be pre-cooked and exuded

liquids drained before the addition of the packing medium. Canned fish shall be practically free from units of mushy and brittle texture indicating poor quality raw material or fish softened by excessive parasitical infestation.

6.2.2 Fillets

Where fish is packed as fillets, the fillets shall be reasonably uniform in size. An additional small piece may be included for mass adjustment.

6.2.3 Compliance with product description and sensory requirements

The presentation of the product and its appearance shall comply with the description of the product on the label. The appearance, colour, texture, odour and flavour shall be indicative and characteristic of fresh raw material used. The flesh colour shall be reasonably free from discolouration indicating excessive lipid oxidation or other chemical or biochemical reaction. Unless the product description indicates that fish units are de-skinned or that trawl marked raw materials were used, fish units shall be reasonably free from skin damage and excessive blemishes in the flesh. No canned fish product shall have a muddy appearance indicative of poor raw materials being used. Flesh texture shall not be excessively soft, mushy, tough or rubbery.

6.2.4 Freedom from defects indicating poor manufacturing

Canned fish shall be free from defects such as, but not limited to viscera, head parts or tails unless the presentation matches the description of the product. Canned fish shall be free from unsightly deposits of exuded fish protein curd, loose scales, scutes, fibre, sand, grit, intestines or spilled feed, loose parasites and other extraneous matter. Any residual scales shall be soft.

6.3 Canned marine molluscs (including cephalopods)

6.3.1 Preparation

When packed with shells, any growth on the external surfaces of the shells and meats shall be removed. Byssus shall be removed. In the case of abalone cleaning of the flesh shall include removal of the mouth and guts. The adhering mucous and epithelium between fringes and foot shall be brushed off. Abalone may be treated with preparations of salt and lime solutions to remove mucous. No bleaching agents shall be used.

6.3.2 Packing medium

The packing medium shall be free from excessive exuded materials indicating poor cleaning and manufacturing techniques or use of poor quality raw materials.

6.3.3 Compliance with product description and sensory requirements

The product shall comply with the size description where declared or shall be otherwise uniform in colour, appearance and size. Where male and female units of some molluscs differ in colour (e.g. black mussels) they may be packed as such but colours must be characteristic of the freshly cooked product. The texture shall be characteristic of the species and firm, succulent, but not difficult to chew and swallow. Meats shall not be disintegrated, mealy, chalky, mushy or doughy.

6.3.4 Freedom from defects indicating poor manufacturing

The product shall be free from sand, grit, byssus, obvious parasites or other extraneous contaminants that may not be of marine mollusc origin, but indicate poor cleaning and manufacturing practises. In case of marine mollusc meats, no sharp pieces of shell or other foreign matter that pose a threat to human health, may be present.

6.4 Canned crustaceans

6.4.1 Preparation

The product shall be prepared as in 5.4.2.

6.4.2 Packing medium

The colour of the packing medium shall be characteristic of good quality raw material and free from excessive protein curd or discolouration indicative of chemical breakdown or staining.

6.4.3 Compliance with the product description and sensory requirements

The product shall be free from uncharacteristic discolouration such as blue and black stains. In flesh packs the pigment of the flesh shall be bright and natural white to off-white. The flesh shall be firm, yet tender and shall not be disintegrated, soft, mushy or soggy.

6.4.4 Freedom from defects indicating poor manufacturing

Crustacean meat packs shall be free from inedible parts, shells or pieces of shell and swimmerets. The product shall be free from foreign matter not derived from shrimp and no foreign matter that may pose a health risk may be present.

7 Product-specific requirements

7.1 Canned fish (see also 5.2 and 6.2)

7.1.1 Canned pilchards, sardinella, herring, mullet, sauries and similar types of canned fish and canned sardines

7.1.1.1 Preparation

7.1.1.1.1 Pilchards

Fins need not be removed.

7.1.1.1.2 Sardines

When sardines are packed vertically in the can, the scales shall be removed unless the product is described as scales on and the scales are soft.

7.1.1.1.3 Products packed in sauce

The fish product shall be covered or partially covered with sauce upon opening of the can and the product shall comply with the description of the product. The presence of natural fish oils in the sauce is acceptable but there shall not be excessive separation of water from the sauce. Fish units shall be of uniform size and there shall not be excessive disintegration of flesh and bellies indicative of poor quality raw material or of bad manufacturing practice. In case of skin-on portions, fish skins shall be reasonably intact and not show signs of microbiological, biochemical or physical deterioration.

7.1.1.2 Drained mass

7.1.1.2.1 The average drained mass of pilchards, mullet, herring, sardinella and similar types of fish packed in sauce and of sardines packed in vertical cans shall be not less than 70 % of the declared mass. No individual drained mass shall be less than 65 % of the d.n.m. of products under 7.1.1.

7.1.1.2.2 When pilchards are presented in a brine or water packing medium in round vertically packed cans, the minimum drained mass shall be not less than 65 % of the d.n.m.

7.1.1.2.3 When packed as fillets of pilchards, sardinella, sardines or similar types of fish in flat cans and in a thick sauce, the drained mass shall be not less than 60 % of the d.n.m.

7.1.1.2.4 Mullet and herring fillets packed in flat cans and in a thick sauce shall have a drained mass of not less than 60 %.

7.1.1.2.5 The total drained mass of fish products packed as semi-preserves, where the packing medium composition preserves the product, shall be not less than 60 %.

7.1.1.3 Absence of scales and viscera

Unless fish is labelled scales on, not more than 10 % of the units examined as per 11.14 shall be covered with scales. Unless the fish is presented as packed in the round when determined in accordance with 11.13 the product shall contain not more than 3 % of viscera and loose green feed.

7.1.2 Canned sardines in oil or sauce, with oil added and including cured sild sardines, cured brisling, cured pilchards and similar types of fish in canned sardine style and packed horizontally in flat cans

7.1.2.1 Preparation

Head and gills shall be completely removed. The fish may be eviscerated and if eviscerated, shall be practically free from visceral parts other than roe, milt or kidney (as per 7.1.1.3). If fish is ungutted, the product shall be practically free from loose feed. If the product is presented ungutted or scales on, the manner of presentation shall be disclosed in the product description (unless it is fish packed in units of more than 5 in a small Dingley container of net mass less than 120 g. In this case it is not required to disclose this information).

7.1.2.2 Packing and packing medium

Units shall be neatly finger layed so that there are not excessive void spaces between fish units and fish units and the container. Over filling causing bulging of can lids or mechanical damage to the fish, shall be avoided. Where the product is packed in an oil packing medium such as vegetable oil, the packing medium shall be reasonably free from excessive cooked out protein curds and turbidity indicating poor raw material quality or poor cleaning of fish. Where products are depicted as sardines in a particular oil, the exuded liquid in the oil shall not exceed 30 % of the packing medium.

7.1.2.3 Drained mass

When sardines are packed in an oil or a thin watery medium, the drained mass shall not be less than 75 % of the d.n.m. when determined in accordance with 11.3. When sardines are packed in a thick sauce, the average drained mass of the containers shall be not less than 70 % of the d.n.m with no individual drained mass less than 65 %.

7.1.3 Canned maasbanker (jack mackerel or horse mackerel), mackerel, canned snoek and similar types

7.1.3.1 Preparation

Fins need not be removed but in the case of Maasbanker, the tough scutes and sharp dangerous spines at the dorsal and anal fins shall be removed.

7.1.3.2 Drained mass

When determined in accordance with 11.5 the drained mass shall be as follows:

- when fish units are cut in cutlets or middle cuts, the drained mass shall be not less than 70 %,
- in the case of fish fillets packed in shallow flat cans, the drained mass shall be not less than 60 % of the d.n.m.

7.1.4 Canned tuna, albacore and bonito

7.1.4.1 Preparation and presentation

The product shall be produced from pre-cooked tuna flesh from the species listed under 10.3.2.10.

Tuna shall be presented as tuna meat preparation forms (unless it is described differently on the label) as per the following:

a) Solid:

Fish is cut into transverse segments that are placed in the can with their transverse cut ends parallel to the ends of the can. The proportion of free flakes or chunks shall not exceed 18 % of the drained mass of the container when determined in accordance with 11.5.

The structure of the solid tuna meat shall be well defined and shall turn out of the can in a basically single portion.

b) Chunks:

A mixture of pieces of fish most of that have dimensions of not less than 12 mm in each direction and in that the original muscle structure is retained. The presence of pieces of flesh of that the dimensions are less than 12 mm shall not exceed 30 % of the drained mass when determined in accordance with 11.5.

c) Flakes:

A mixture of particles and pieces of flesh that have dimensions less than 12 mm in each direction but in which the muscular structure of the flesh is retained. The proportion of pieces of flesh of which the dimensions are less than 12 mm shall exceed 30 % of the drained mass of the container as determined in accordance with 11.5.

d) Grated or shredded:

A mixture of particles of fish that have been reduced to a reasonable uniform size in that particles are discrete and do not comprise a paste.

e) Tuna with vegetables and/or fruit and/or cereals:

The tuna component shall be in the form of flakes or shredded and the colour shall be light as required in 7.1.4.2.

f) Other presentations:

Any other presentation shall be permitted provided that it is sufficiently distinctive from the forms of presentation or preparation laid down in 7.1.4.1, meets all other requirements of this specification and is adequately described on the label to avoid confusing or misleading the consumer.

7.1.4.2 Colour of white or light meat tuna

For the purpose of labelling, canned tuna shall fall within one of the following colour designations:

a) White tuna or white meat tuna:

Canned tuna of the species *Thunnus alalunga* (albacore) that has a diffuse luminous reflectance of not less than 33,7 % of that of magnesium oxide when that reflectance is measured by the method in SANS 5137 (SABS SM 137), *Daylight 45°, 0° luminous directional reflectance of surface coatings and pigments*. This is approximately equivalent to 6.3 Munsell units when examined in accordance with 11.12; and

b) Light tuna or light meat tuna:

Canned tuna that has a diffuse luminous reflectance of not less than 22,6 % of that of magnesium oxide when that reflectance is measured by the said method. This is approximately equivalent to 5,3 Munsell units when examined in accordance with 11.12.

The colour in each pack shall conform to its description and shall be reasonably uniform. There shall be no dark meat and the product shall be practically free from discoloured muscle due to bruising, blood, parasitical infestation or lipid oxidation. The flesh of different species of tuna shall not be packed together. Discolouration due to lipid oxidation, sugar caramelisation or persistent flushed pink, orange or green colours in the flesh shall not exceed 5 % of the drained contents. Metal soiling or staining shall be absent.

7.1.4.3 Dark meat tuna or dark tuna

Canned tuna that does not meet the colour requirements of light meat tuna or that is packed by using dark meats, may be described as dark meat tuna or dark tuna.

NOTE Colour of tuna is usually determined subjectively by trained and experienced inspectors. The test methods in 7.1.4.2 need only be employed in cases of dispute.

7.1.4.4 Opening appearance and packing medium

The cans shall be well filled with fish and the flesh pack shall be reasonably free from voids. In case of solid packs the structure of the solid tuna meat shall be well defined and shall turn out of the can in a basically single portion. The product shall be free from excessive exuded protein curd indicating poor quality raw material or bad manufacturing procedures. The packing medium shall comply with requirements of 6.1.10.

7.1.4.5 Drained mass

When determined in accordance with 11.5 the drained mass shall be as follows:

- the average drained mass of containers examined shall be not less than 70 % of the d.n.m. with no individual drained mass less than 65 % of the d.n.m.;
- where canned tuna is packed in a thick sauce the drained mass shall be not less than 60 % of the d.n.m.;
- where tuna is packed in a thick sauce with garnish, the drained mass shall be not less than 55 % of the d.n.m.; and
- where tuna is packed with vegetables and/or fruit and/or edible garnish and/or cereals, the total drained mass shall be not less than 55 % of the d.n.m. and the drained mass of the tuna content shall be not less than 25 % of the d.n.m.

7.1.4.6 Absence of certain particular defects

The product shall comply with the description on the label. The product shall be free from bones, fins, viscera, large blood vessels longer than 10 mm and shall be practically free from blood clots greater than 6 mm in diameter.

7.1.5 Canned kippers, bloaters and similar types

7.1.5.1 Presentation

Kippers, bloaters, and similar types of cured fish may, except when packed as fillets, be packed with heads, tails and fins.

7.1.5.2 Drained mass

When determined in accordance with 11.5 the drained mass shall be as follows:

- a) be not less than 70 % of the d.n.m; and
- b) be not less than 60 % of the d.n.m. when packed in flat shallow containers.

7.1.6 Canned salmon

7.1.6.1 Preparation and presentation

Canned salmon shall be prepared from fresh or frozen raw material of salmon species listed in 10.3.2.12. The heads including the gills, viscera including the roe, tails, fins, loose scales, milt and blood shall be removed. Damaged or discoloured flesh, bruises or wounds shall be cut away.

Canned salmon shall consist of sections of fish that are cut transversely and in equal lengths and that are filled vertically into the can. The sections shall be packed in the container so that the cut surfaces are approximately parallel with the ends of the container and the skins parallel to the walls of the container.

Any other presentation may be permitted provided that it

- a) is sufficiently distinctive from the form of presentation laid down above,
- b) meets all other requirements of the specification, and
- c) is adequately described on the label to avoid confusing or misleading the consumer.

7.1.6.2 Drained mass

When determined in accordance with 11.5 the drained mass shall be as follows:

- a) be not less than 70 % when fish units are cut into cutlets or middle cuts; and
- b) be not less than 60 % of the d.n.m. in case of fish fillets packed in shallow flat cans.

7.1.7 Canned hake, cod, kabeljou and similar types

7.1.7.1 Preparation and presentation

The product may be smoked and shall be prepared from fresh or frozen raw material from which the heads, viscera including the roe, tails, fins, loose scales, milt and blood shall be removed. All visible parasites and unsightly bruises and wounds shall be removed. The product shall consist of sections of whole fish that are cut transversely and in equal lengths and that are filled vertically into the can. Fillet or fillet portions may be packed. Any presentation that is adequately described on

the label so as to avoid confusing or misleading the consumer may be permitted. The product shall be free from hard bones that may hurt the palate and that may be an indication of insufficient heat processing. Backbones present on cross cuts shall only be present as an integral part of the cut section of the fish and shall not appear separated from the muscular structure.

7.1.7.2 Drained mass

The drained mass, when determined in accordance with 11.5, shall be not less than 70 % of the d.n.m. in the case of transversely cut sections of the whole fish packed vertically; and 60 % of the d.n.m. in the case of fillets and fillet portions packed in shallow flat cans.

7.1.8 Curried fish and pickled fish

7.1.8.1 Preparation and presentation

The product preparation and presentation shall be as discussed in 7.1.7.1. Fish portions may be dipped in flour, batter or other suitable coating and may be pre-cooked, pre-fried or pre-baked. The product is packed with curry sauce containing at least a mass fraction of 5 % onions in the case of pickled fish.

7.1.8.2 Drained mass

7.1.8.2.1 Curried fish

The washed mass of all solid components in curried fish product shall be not less than 50 % of the d.n.m. In case of a battered (or breaded) product, the fish and batter content shall be not less than 45 % of the d.n.m.

7.1.8.2.2 Pickled fish

The washed mass of all solid components shall be not less than 50 % of the d.n.m. and the mass of the fish core content shall be not less than 35 % of the d.n.m. on condition that at least 5 % of the d.n.m. consists of onions. A fish core content of 40 % is required where less than 5 % onions are used.

7.1.8.3 Absence of particular defects

Where fish units are covered in batter, the batter shall not separate excessively from fish units or crumble to form an excessive amount of sediment in the can. Where onions are present, they shall not be abnormally dark or discoloured. The surfaces of fish ends shall not be abnormally dark discoloured. There shall be no dark discoloured oil in the packing medium.

7.1.9 Canned salted or salt cured/dried anchovies or sardines

7.1.9.1 Preparation, preservation and presentation

The fish shall be salted or salt cured before canning. The product may be preserved by salt and chilled storage (below 5 °C) or by pasteurization or heat processing to render it shelf stable. When presented as fillets, the backbones shall be removed. The product may be presented as whole fish, headed and gutted fish, flat or rolled fillets or any presentation fitting the description on the label. Garnish may be used and the product may be packed dry with salt, salted in own juices, in a salt pickle or in oil. Units in flat shallow containers shall be packed to avoid void spaces between units and units and the container.

7.1.9.2 Drained mass

When the drained mass is determined in accordance with 11.5, the fish and garnish content shall be at least 70 % of the d.n.m.

7.1.9.3 Absence of particular defects

Filletts shall not have dangerous protruding bones that can hurt the palate or throat. Fish units shall be firm and not mushy, slimy, mealy or disintegrating. There shall be no indication of mould or halophilic discolouration of units. Units shall be reasonably uniform in size unless described otherwise.

7.1.10 Canned fish for bulk catering and re-manufacturing purposes

7.1.10.1 Preparation and presentation

Except for texture, uniformity of unit size, and the permissible presence of cross-filled units and turbidity in brine or in other packing medium, fish for bulk catering and re-manufacturing purposes shall comply with the requirements of this specification. Units may be packed with the tails intact; the heads and guts (viscera) however shall be removed. It may be a solid pack or contain packing medium. It shall be labelled to disclose its true nature, with the name of the fish used being declared.

In the case of catering packs in a packing medium such as tomato, the packing medium shall be dispersed through the pack to cover almost all the fish units.

7.1.10.2 Drained mass

The drained mass, when determined in accordance with 11.5, shall be not less than 70 % of the d.n.m.

7.1.11 Canned minced fish

7.1.11.1 Preparation and presentation

The product shall not consist out of a mixture of fish species unless this is conspicuously declared in the name of the product.

Except for requirements rendered inapplicable by the nature of the pack, canned minced fish shall comply with the requirements of this specification.

Except that damaged fish units may be permitted, the raw fish used shall comply with this specification.

The product shall be prepared from the body parts of fish without the heads and viscera. The bone to flesh ratio shall practically be the same that occurs in middle cut pieces of fish. Excessive tail-end pieces and scales shall be not used. Pieces of the head, gills, gut, intestines or its contents or other unsuitable or any unsound fish parts shall not be used.

It shall be labelled to disclose its true nature, and the name of the fish used shall be declared in the name of the product and in the list of ingredients.

7.1.11.2 Absence of certain particular defects

When determined in accordance with 11.16, the product shall not contain more than 5 % starch.

The product shall have a uniform minced texture where the flesh has been reduced to a uniform size in that particles are discrete and do not comprise of a paste or an emulsified texture. The product shall not contain large pieces of fish. It shall not contain a large amount of denatured protein or honeycombing. The texture shall not be soggy or watery. It shall not have a gritty texture due to the presence of an abnormally high amount of bone pieces or a high amount of scales or any other added ingredients that cause grittiness in the product. The texture shall not be extremely closed and excessively compact or doughy.

The product shall not contain an excessive amount of exuded aqueous material. It shall be practically free from other exuded matter such as starch and protein.

Upon removal out of the container, the product shall retain essentially the shape of the container without falling apart and shall practically be free from excessive surface cavities that affect its appearance.

The product shall have an acceptable uniform colour. The colour of the product shall not be abnormally dark due to excessive amounts of skin pigment and tail-ends. It shall be practically free from discolouration on the surface due to oxidation.

The product shall be free from discolouration such as metal soiling or scorching. The product shall be free from fish eyeballs. Green feed, gut or pieces of gut shall be absent.

The odour and flavour of the product shall be characteristic of the fresh product and bitter or scorched flavours and odours shall be absent.

7.1.12 Marinated fish products with or without vegetables

7.1.12.1 Preparation and presentation

The product shall be prepared from fillets or cut pieces of specific fish types packed in brine or a suitable sour sauce with or without sweeteners, spices or herbs or other suitable ingredients.

7.1.12.2 Drained mass

When determined in accordance with 11.5, the drained mass of the fish content shall be not less than 50 % of the d.n.m.

7.1.13 Canned kedgerree and canned smoorfish

Preparation and presentation

The product shall be prepared from species of fish flesh suitable for the purpose. The product shall not contain a mixture of fish species unless this fact is conspicuously declared in the name of the product. The trimmed and cleaned fish shall be pre-cooked before flaking and only light-coloured flesh shall be used. Where possible bones shall be removed and no hard bones may remain in the final product. No dark discoloured fish or vegetables shall be present.

When determined in accordance with 13.1, the protein nitrogen content derived from the fish flesh of kedgerree shall be not less than 1,3 % by mass. Kedgerree may contain cereal, other starchy material, egg, other ingredients and garnish.

When determined in accordance with 13.1, the protein nitrogen content derived from the fish flesh of smoorfish shall be not less than a mass fraction of 1,5 %. The remainder of the contents shall be vegetables or cereals or both, or other ingredients.

7.1.14 Canned fish cakes and canned fish balls

7.1.14.1 Preparation and presentation

Fish cakes and fish balls shall be prepared from flaked, shredded, or minced fish flesh with or without the addition of seasoning ingredients, edible starchy material, egg and other ingredients. Bones shall be removed where practicable. No bones that are hazardous to the consumer shall be present. The head, gills, gut, intestines or its contents or other unsuitable or any unsound fish parts shall not be used.

The product described as fish balls shall be formed into characteristic rounded shaped units and the product described as fish cakes shall be formed in flat rounded disc-like shaped units.

The units shall not be ragged or disintegrated and shall retain their shape when normally handled.

The units shall not be soggy or mushy and shall be free from grittiness.

7.1.14.2 Fish protein nitrogen content

When determined in accordance with 13.1, the protein nitrogen content derived from the fish flesh in the fish cakes or fish balls without the packing medium shall be not less than 1,0 % by mass.

7.1.14.3 Drained mass

7.1.14.3.1 Packed in brine or sauce

The drained mass of the product when determined in accordance with 11.5, shall be not less than 60 % of the d.n.m.

7.1.14.3.2 Packed with vegetables, fruit or cereals

The drained mass of the fish content of the cakes or balls shall be at least 25 % of the d.n.m. and the total drained mass of all solid components at least 55 % of the d.n.m. when determined in accordance with 11.5.

7.1.15 Canned fish roe and caviar

7.1.15.1 Preparation and presentation

7.1.15.1.1 Fish roe

The product shall be prepared from roes in which membranes and connective tissue may be present but from which blood and adhering particles of entrails have been removed. It shall be packed in brine. The container shall be well-filled.

7.1.15.1.2 Caviar

Caviar shall be prepared from cured roe free from membrane and connective tissue. It may be packed in brine. The product shall not be mushy or tough. Artificial preparations resembling the product shall not be labelled as caviar.

7.1.15.2 Drained mass

Except when packed as a dry product the drained mass when determined in accordance with 11.5 shall be at least 70 % of the d.n.m. The drained mass of fish roe in the membrane shall be at least 60 % of the d.n.m. When packed as a dry product the containers shall be practically full.

7.1.16 Fish paste, fish pâté and fish spread

7.1.16.1 Preparation, preservation and presentation

For purposes of this specification fish paste, pâté and spread shall be deemed to include paste containing the edible flesh of crustaceans or molluscs either as major or minor ingredient.

The product shall be prepared from clean, sound fish, fresh or preserved, that has been comminuted to form a smooth, spreadable paste or in the case of a spread may contain coarse pieces. It may contain tomato, prepared vegetable material, starchy material, salt, spices, milk powder, fat, or oil of vegetable or fish origin, seasoning and flavouring substances, and other acceptable ingredients. Head or head parts of the fish, the gills, intestines or intestines contents, cartilage or other unsuitable or any unsound parts shall not be used.

Unless the salt concentration is adequate to preserve it, the product shall be processed by heat to ensure preservation.

The texture of the product shall be well bodied but readily spreadable without being watery or excessively soggy. It shall have a smooth textured appearance without being emulsified.

The product shall be free from separated fat starch, denatured protein or aqueous material. Discolouration other than slight surface discolouration due to oxidation, shall not be present.

There shall not be indications of inadequate mixing of ingredients. The texture shall be homogeneous throughout the contents of the container without separation of the components or tendency to separate the components. The contents of the container shall be reasonably free from air bubbles. Large void cavities shall be not present.

When examined in accordance with 11.10, it shall be free from sandiness, grittiness or palpable pieces of bone or shell particles.

The product shall be free from clots of materials such as clots of cereals or other inadequately mixed portions of ingredients or other abnormalities such as specks and stained areas.

7.1.16.2 Fish protein nitrogen content

When determined in accordance with 13.1, the protein nitrogen content derived from the fish flesh shall be not less than a mass fraction of 2 %. When determined in accordance with 13.2, the starch content of the product shall not be more than a mass fraction of 6 %.

Where the product is described as a spread with vegetables and/or fruit, the protein nitrogen content of the fish flesh, as determined in accordance with 13.1 shall be not less than a mass fraction of 0,7 %.

7.1.17 Fish sausages

7.1.17.1 Preparation and presentation

The product shall be prepared from clean and sound minced or finely chopped fish flesh, either fresh, frozen, cured or canned. It may contain starchy material, salt, spices, fat or oil of vegetable or fish origin, seasoning and flavouring substances and other permissible ingredients. The sausages may be smoked.

The product shall be formed either in artificial casing (that, if not edible, shall be completely stripped before the product is packed into containers), or in natural casings of animal origin.

7.1.17.2 Composition

When determined in accordance with 13.1, after draining and removal of the packing medium, the protein nitrogen percentage derived from fish flesh shall be not less than a mass fraction of 2 %. When determined in accordance with 13.2 the sausages without the packing medium shall not contain a mass fraction of more than 6 %.

7.1.17.3 Drained mass

When determined in accordance with 11.5, the drained mass of the product shall be not less than 75 % of the d.n.m.

7.1.17.4 Absence of particular defects

The sausages shall have an evenly fine to slightly coarse, smooth and a firmly stuffed texture. The sausages shall not be soggy. They shall be free from grittiness, cavities and air pockets.

The sausage units shall be acceptably uniform in size, shape and colour and shall be free from discolouration and ragged or irregularly cut ends. The units shall be not distorted or twisted. Off-cut pieces, bursts, and cut-marked units shall be not present. Pieces of fish bone shall not be present. Sausages shall completely be separated from one another. The sausages shall be free from impression marks such as caused by the expansion rings on the side walls of the container. Sausage units that are cross-filled in relation with other units in the container shall not be present. Cross-cut units shall be cleanly cut at square angles to their longitudinal axes. Spices present shall not adversely affect the appearance of the product.

7.1.18 Canned fish, including marinated products, with vegetables and/or fruit and/or cereals

7.1.18.1 Preparation and presentation

The product shall be prepared from fish or cuts of fish packed with vegetables and/or fruits, and/or cereals and/or edible garnish, together with seasoning materials, spices or other appropriate ingredients.

7.1.18.2 Drained mass

When determined in accordance with 11.5, the total drained mass of the container contents shall be not less than 55 % of the d.n.m. When fish appears first in the name of the product, the drained mass of fish shall be not less than 25 % of the d.n.m. When fish does not appear first in the name of the product, the fish content shall constitute not less than 10 % of the d.n.m. unless the fact that it constitutes less than 10 % is declared on the main panel of the label.

7.2 Canned marine molluscs and cephalopods

7.2.1 Canned abalone

7.2.1.1 Preparation and presentation

The abalone units shall be smoothly trimmed and guts and mouth pieces shall be removed. The fringes need not be removed. Flesh showing unsightly fork marks or other damage shall not be used for the packing of wholes or halves unless being trimmed and used as filler pieces.

Abalone shall be packed as wholes or as halves. Wholes and halves shall be not packed in the same container unless only one half is used as a filler piece to make up the correct mass. A small piece may be added to adjust the fill of the container. Such a filler piece shall be not less than 70 g in mass. Not more than one filler piece may be added.

Other forms of presentation may be permitted provided that they

- a) meet all regulatory requirements, and
- b) are adequately described on the label in accordance with the labelling requirements.

The container shall be well filled but not overfilled with the fish and packing medium. Distortion of the circular curve of the cans by forcing large abalone units into the cans with the consequent risk of affecting the integrity of the hermetical sealing of lids onto the cans shall be prohibited.

7.2.1.2 Drained mass

The drained mass, when determined in accordance with 11.5, shall be not less than 50 % of the d.n.m. Where the abalone content of any product is less than 50 % the product description shall be clear to indicate that it is a special type of product of which abalone is an ingredient, and the drained mass of the abalone shall be prominently declared on the label.

7.2.1.3 Absence of particular defects

Abalone units shall be free from discolouration due to oxidation or objectionable discoloured surfaces or stained marks or spots. The abalone units shall not have an abnormal dark colour. The product shall not contain abalone units with excessive dark colours due to high metal content such as iron, copper, lead or mercury.

The abalone units in any one container shall be reasonably uniform in colour.

The abalone units shall be practically free from abnormal surface cracks. Whole abalone units shall not be damaged or have unsightly cut marks or fork marks. When more than two abalone units are packed in any one container they shall be reasonably uniform in size. The product shall be free from viscera, mouth parts and black or dark pigmented parts.

When the packing medium is brine or water the packing shall be clear and free from any curd and turbidity such as milkiness and sediment.

Canned abalone shall have a firm, springy, chewy but succulent texture.

The texture shall be not abnormally soft or brittle. The internal texture of the whole abalone body shall be not mushy or disintegrated (soft heart) or mealy, or chalky, or crumbled or doughy. The texture shall be not dried or shrunken.

7.2.2 Canned mussels, oysters, clams, cockles, scallops, whelks and marine molluscs other than abalone

7.2.2.1 Presentation and presentation

Canned molluscs other than abalone may be packed from molluscs that were pre-cooked or raw, smoked or unsmoked, whole unshelled or shucked units. The molluscs units shall be culled, washed where appropriate and if necessary trimmed and packed in containers with, or in, a suitable oil, brine, own juice, a suitable sauce or another suitable grade packing medium.

Canned marine molluscs products may consist of marine molluscs packed with vegetables, fruits, cereals or other appropriate ingredients.

Other forms of presentation may be permitted provided that they

- a) meet all regulatory requirements, and
- b) are adequately described on the label and in accordance with the labelling requirements.

Shelled molluscs units presented in a shallow type container shall be neatly packed in rows close together with all units in the same upside down positions. There shall be no void spaces between the molluscs units or between the molluscs units and the walls of the container.

Cans shall not be over filled to the extent that they cause mechanical damage of the molluscs units or result in bulging lids.

Molluscs units packed without the shell shall be reasonably uniform in colour and in size. When smoked, the molluscs units in any one container shall have a uniform smoked colour.

Molluscs units shall not contain excessive amounts of green feed to the extent that it causes the discolouration of the packing oil.

Where the product is packed in an oil packing medium such as a vegetable oil, the packing medium shall be reasonably free from sediment and turbidity. Where the product is presented as a type of molluscs in "X" oil where "X" indicates the type of oil, the exuded liquid in the oil determined in accordance with 11.6 shall not exceed 30 %.

7.2.2.2 Drained mass

When determined in accordance with 11.5, the drained mass when packed in vertical containers shall be at least 60 % of the d.n.m.. When packed in flat cans the drained mass shall be at least 70 % of the d.n.m. Baby clams packed in vertical cans shall have a drained mass at least 50 % of the d.n.m.

7.2.3 Canned cephalopods (octopus, squids and cuttlefish)

7.2.3.1 Preparation and presentation

Cephalopods may be presented as whole, legs only, or cut pieces of the legs, heads or pieces of heads or a mixture of cut pieces from the cephalopods. Cephalopods may be packed with vegetables, fruit or cereals.

Cephalopods may be packed in an oil packing medium, brine or in water or in its own juice such as the ink.

7.2.3.2 Drained mass

The drained mass, when determined in accordance with 11.5, shall be not less than 60 % of the d.n.m.

7.2.4 Canned molluscs and vegetables and/or fruit and/or cereals and/or edible garnish

7.2.4.1 Preparation and presentation

The product may consist of molluscs with vegetables and/or fruits and/or cereals and/or with edible garnish together with seasoning materials, spices or other appropriate ingredients.

7.2.4.2 Drained mass

The total drained mass, when determined in accordance with 11.5, shall be not less than 55 % of the d.n.m. When molluscs appear first in the name of the product, the drained mass of the molluscs shall be not less than 25 % of the d.n.m., unless the fact that the drained mass of the molluscs is less than 25 % appears on the label. When molluscs do not appear first in the name of the product, the mass content of the molluscs shall constitute not less than 10 % of the d.n.m, unless the fact that it constitutes less than 10 % is declared on the main panel of the label.

7.3 Canned crustaceans

7.3.1 Lobster and rock lobster

7.3.1.1 Preparation and presentation

7.3.1.1.1 Lobster and rock lobster tails

In the packing of lobster and rock lobster tails, a small additional portion of tail flesh may be introduced to adjust the fill of the container. Whole or half tails shall be neatly folded or arranged with as much as possible of the red pigment of the epidermis of the flesh visible on the outside.

7.3.1.1.2 Lobster and rock lobster tails with other meat

The contents of the container shall be neatly and uniformly arranged. The tails shall be folded and packed around the other meat, the latter being centred in the container as far as possible. As much as possible of the pigment of the tails and other meat shall be visible.

7.3.1.1.3 Lobster and rock lobster limb and body meat

Where packed in pieces retaining to a large extent their original shape and size, the meat shall be neatly arranged in the container with as much as possible of the pigmented surfaces uppermost. Where the product is described only as "meat", this requirement shall not apply.

7.3.1.2 Drained mass requirements

7.3.1.2.1 Plain packs

The drained mass, when determined in accordance with 11.5, of the product shall be not less than 75 % of the d.n.m.

7.3.1.2.2 Packs in sauce medium

The drained mass, when examined in accordance with 11.5, shall be not less than 70 % of the d.n.m.

7.3.2 Lobster tomalley

The hepatopancreas, roe, meat from the limbs and body, and other edible parts of the lobster may be used. The gills, guts, stomach, shell particles, cartilage, and other unsuitable parts and any unsound parts shall be not used. Filler or other extraneous ingredients shall be not used.

7.3.3 Shrimps, prawns and langoustines

7.3.3.1 General preparation and presentation

Canned shrimps, prawns and langoustines shall be prepared from edible species of the families designated in 10.3.5(g)(h)(j) from which heads, shell and antennae have been removed.

The name of the product shall optionally be "shrimp", "shrimps" or "prawns" or where applicable "langoustines". (Both "shrimps" and "prawns" shall hereafter be denoted in the term "shrimp").

Canned shrimp may be presented as follows:

- a) **Peeled:** Shrimp that have been headed and the shell and tail fin removed but without removal of the dorsal tracts;
- b) **Peeled and de-veined or cleaned:** Peeled shrimp that the back have been cut open and the dorsal tract removed at least to the last segment of the tail.
- c) **Cocktail (picnic):** Mixture of peeled shrimp sizes that when determined in accordance with 11.8(ii) does not contain more than a mass fraction of 15 % broken shrimp in a container.
- d) **Salad:** Mixture of peeled shrimp sizes that when determined in accordance with 11.8(ii) does not contain more than a mass fraction of 50 % broken shrimp in a container.
- e) **Broken:** Pieces of peeled shrimp consisting of less than four segments. This may also denote product containing more than the percentage of broken shrimp permitted in the above categories.

7.3.3.2 Size designation of shrimp

Canned shrimp may be designated by size in accordance with (a) the actual count range adherent on the label, or (b) as per provisions stated below.

The terms "extra large", "jumbo", "large", "medium", "small", "tiny" may be used provided that the range is in accordance with table 1. The number of whole shrimp (including pieces greater than 4 segments) per 100 g of drained product are indicated in table 1.

Table 1 □ Size designation of canned shrimp

1	2
Designation	Number of whole shrimp per 100 g of drained product
Extra large, jumbo	13 or less
Large	14-19
Medium	20-34
Small	35-65
Tiny or miniscule	More than 65

7.3.3.3 Drained mass

The drained mass of shrimp or langoustines when determined in accordance with 11.5, shall be not less than 60 % of the d.n.m.

7.3.3.4 Absence of particular defects

a) Criteria for broken shrimp:

When examined in accordance with 11.8, the presence of broken shrimp shall not exceed the criteria in tables 2 and 3.

Table 2 □ Broken shrimp permitted per size designation

1	2
Size designation	Maximum percentage (as a mass fraction) of broken shrimp permitted
Extra large, jumbo	5
Large	5
Medium	5
Small	10
Tiny, miniscule	15
No size designation	10

Table 3 □ Broken shrimp permitted per style designation

1	2
Style	Maximum percentage (as a mass fraction) of broken shrimp permitted
Picnic, cocktail	15
Salad	50
Broken	No maximum

b) Criteria for broken langoustines:

When examined in accordance with 11.8, langoustines shall contain not more than a mass fraction of 5 % of broken units.

c) Cleaned or deveined:

When examined in accordance with 11.8, not more than a mass fraction of 5 % improperly deveined or cleaned units shall be present in a product labelled as "deveined" or "cleaned".

d) Discolouration:

Except for sulphide staining (blackening) and when determined in accordance with 11.8, not more than a mass fraction of 15 % of the units shall be affected by distinct discolouration of more than 10 % of the surface area of the individual shrimp or with faded pigment or liver stain.

Black stained units due to sulphide staining developed on the inside surfaces of containers shall not be present.

7.3.4 Crab meat**7.3.4.1 Preparation and presentation**

Canned crab meat shall be prepared single or in combination with the leg, claw, body and shoulder meat from which the shell has been removed from edible species designated in section 10.3.5(i).

The name of the product shall be "crab" or "crab meat" and shall be preceded or followed by the common or usual name applied to the species if the possibility exists of the consumer being confused.

In addition, the product name shall include descriptive terms which accurately reflect the contents without misleading or confusing the consumer.

Where leg meat is presented, the leg meat shall be neatly arranged on top, or may also be at the bottom of the container with as much as possible of the pigmented surfaces uppermost.

When leg meat is declared as a percentage of leg meat in the product, the composition of leg meat shall be determined as a percentage of the total drained mass of the contents.

Where a product is presented as chunk meat at least 50 % of the total drained mass of the contents shall consist of solid pieces or chunks of crab meat.

7.3.4.2 Drained mass

The drained mass, when determined in accordance with 11.5, shall be not less than 70 % of the d.n.m.