

EXPORT OF CANNED FISH AND FISHERY PRODUCTS (QUALITY CONTROL AND INSPECTION) RULES, 1983

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EXPORT OF CANNED FISH AND FISHERY PRODUCTS (QUALITY CONTROL AND INSPECTION) RULES, 1983

S.O.863.- In exercise of the powers conferred by Sec. 17 of the Export (Quality Control and Inspection) Act, 1963 (22 of 1963) and in supersession of the Notification of the Government of India in the Ministry of Commerce No. S.O.456, dated the 5th February, 1977, except in respect of things done or omitted to be done, the Central Government hereby makes the following rules, namely:-

1. Short title and commencement :-

- (1) These rules may be called the Export of Canned Fish and Fishery Products (Quality Control and Inspection) Rules, 1983.
- (2) They shall come into force on the date of their publication in the Official Gazette.

2. Definitions :-

In these rules, unless the context otherwise requires-

- (a) "Act" means the Export (Quality Control and Inspection) Act, 1963 (22 of 1963).
- (b) "Agency" means any one of the Export Inspection Agencies established under Section 7 of the Act.

(c) "Canned Fish and Fishery Products" means-

I. All types of prawns (Shrimps) canned either in brine or in any other internationally approved medium or dry packed.

II. Crab Meat Canned either in brine or any other internationally approved medium from meat of crabs like *Scylla serreta*, *Portunus pelagicus*, *Neptunus peagicus* and *Neptunus sanguinolentus*.

3. Quality Control :-

The Quality Control of Canned Fish and Fishery Products intended for export shall be carried out with a view to seeing that the same conforms to the specifications recognised by the Central Government under Section 6 of the Act by effecting the requirements at 3.1 and 3.2 below together with the levels of control at different stages of processing as given in the Sch. I to these rules annexed hereto.

3.1. Minimum requirements for processing units.-Surroundings, Construction and lay out: Canneries and surroundings area should be such as can be kept reasonably free of objectionable odours, soots, dust or other contamination. The surroundings of canning units shall not have any swamps, dumps or animal housing or unsatisfactory urinals which might pose any sanitary problem. All the immediate approaches of the processing area which are under the physical control of the processor shall be concreted, tarred or turfed in a manner that there shall not be any room for wind blown dust and other contamination. The buildings should be adequate in size to avoid crowding of equipments or personnel, well constructed as to protect against the entry and harbourage of insects, birds or other vermin and to permit easy and adequate cleaning. The entry to the raw material storage area should be provided with nylon or wire meshed double doors. The processing unit shall be housed in a building of permanent nature affording sufficient protection from normal climatic hazards like blown dust and rain. The lay out of different sections shall be such as to facilitate the smooth flow of work and to prevent possible contamination from pre-processing section. The area in which the raw material is received and stored shall be separated from the area where the final product is prepared for packed in such a manner as to eliminate bacterial contamination of the finished product. Areas and compartments used for the storage of edible products shall be separate and distinct from those used for the storage of inedible materials. The food handling area shall be completely separated from the area

used for residential purposes. At each door of entry a foot washing pit of minimum 1.5 metre x 1.2 metre with antiseptic water and a hand washing pot with antiseptic solution shall be provided.

Ceiling wall and Floor.-Ceiling should be designed and constructed to prevent accumulation of dirt, condensations of steam, harbourage of rodents and should be easy to clean. The ceiling should be at least 4 metres (13 ft.) in height, free of cracks and open joint, and should be of a smooth, waterproof and light coloured finish. Internal walls of the cannery should be smooth, waterproof, free of pits and cracks, light coloured and easily washable upto a minimum height of 1.3 meters. Wall to wall and wall to floor junctions may be rounded to facilitate cleaning. Walls should be free from projection and all pipes and cables should be neatly covered wherever necessary. The floors should be constructed of durable waterproof, non-toxic, non-absorbent and non-corroding material which is easy to clean and disinfect. They should be nonslip and without crevices and should slope evenly and sufficiently to drain off water.

Fly-Proofing, Vermin and Animal controls.-The processing area shall be provided with effective fly-proofing arrangements, and other suitable steps shall also be taken to prevent entry of other insects, rodents, birds, cats, dogs etc., into the processing areas. The doors of entry and exit shall have nylon or wire mesh and shall be preferably of double door system. All the windows shall have nylon or wire mesh to prevent dust and fly.

Lighting and Ventilation.- All the working areas shall be well lighted. Light bulbs, and fixtures shall not be directly suspended over the processing table, or at any stage of the preparation of the product. These shall be of safety type to prevent contamination in the event of breakages. The premises should be well ventilated to prevent excessive heat, condensation and contamination with obnoxious odours, dust vapour or smoke. Special attention should be given to the venting of areas and equipment producing, excessive heat steam, obnoxious fumes, vapours or contamination by providing natural or mechanical ventilation. Ventilation openings should be screened and if required, equipped with air filters. Windows which open for ventilation purposes should also be screened. The screens should be made removable for cleaning and should be made from suitable corrosion resistant material.

Working tables and Utensils.-All working tables, work surface,

containers, trays, tanks or other utensils used during the processing of canned fishery products shall be of smooth, impervious, non-toxic material which shall be corrosion resistant and shall be so designed and constructed as to prevent hygienic hazards and permit easy and thorough cleaning. All food contact surfaces, should be smooth, free from pits, crevices, substances harmful to man, and they should be capable of withstanding repeated cleaning and disinfection. Containers used for holding fishery products shall preferably be made of plastic or corrosion-resistant material. Bamboo baskets, wicker baskets and enamelled utensils shall not be used in the processing areas. The table top shall be of stainless steel or aluminium and shall be smooth and free from pits and crevices. Working tables shall be so arranged as to permit smooth flow of work and easy cleaning of the area underneath and around them. No item with rust on it shall be in use in processing hall. Material washing tanks shall be so designed as to provide a constant change of water with good circulation and to have provisions for drainage and easy cleaning. Utensils used for inedible or contaminated materials should be identified by specific coloured painting and should not be used for handling edible products. Adequate waste receptacles shall be provided for the frequent removal of waste materials from the working areas during processing operations.

Equipments and machinery.-Machineries and equipments shall be so designed as they can be easily dismantled to facilitate thorough cleaning and disinfection. Stationary equipments shall be installed in such a manner as will permit easy access and facilitate thorough cleaning and disinfection. Every cannery shall be equipped with the following equipment and machinery in sufficient numbers:

- (a) Seaming machines or double seaming machines of semi-automatic or automatic type maintained in good working condition;
- (b) Retorts equipped with (a) Thermometer, (b) pressure gauge, (c) venting valves and (d) safety valves;
- (c) Exhausting chamber with conveyor system; or any other suitable alternative arrangements;
- (d) Standard weighing machines and weights;
- (e) Blanching tanks and related utensils made of stainless steel;

(d) Code embossing machines, capable of embossing a minimum of 5 digits in a line;

(g) Cooling tanks;

(h) Boiler and accessories of suitable type and capacity to supply steam for all normal operations at a time and all steam carrying pipes properly insulated and protected;

(i) Testing facilities to conduct routine tests such as seaming defects, pH, salinity, vacuum available, chlorine etc. and;

(j) Mechanical lifting equipment to handle crates containing processed cans wherever necessary.

Storage and Warehousing.-The canning units shall have facilities for warehousing the canned products separately. The warehouse shall be of adequate capacity and shall be such that the stored products can be kept dry and non-exposed to extremes of temperatures. This shall also be sufficiently protected from dampness and maintained at a high level of sanitation and hygiene. All detergents and disinfectants shall be stored separately. There shall be separate facility for storing packing materials, toxic substances such as rodenticides, fumigants insecticides or other substances injurious to health except the fire fighting equipment. All these materials and equipments shall be handled by experienced personnel only.

Water and Ice.-There shall be plentiful supply of potable water with suitable chlorination system allowing the residual chlorine content of the water to be varied at will in order to reduce multiplication of micro organisms. If the water used for processing is from sources other than protected water supplies, a certificate of potability of the same from the Agency or institution approved by the Agency shall be produced; if non-potable water is supplied for boiler and other auxiliary services, there shall be no connection between the auxiliary water system and the system carrying potable water. If the water is used from a storage tank, the tank shall be of sufficient capacity and shall be protected from extraneous contamination. The storage tank shall be cleaned at least once in a month. The minimum available chlorine content in water used for processing shall be maintained at 3.5 ppm level. Ice shall be made from potable water and shall be so manufactured, handled and stored as to protect it from contamination. If ice used is from external sources, it shall be ensured that the same is made from potable water and is not contaminated. Ice crushing machine, if

used, shall be kept in good sanitary conditions. A special room or other suitable storage facilities should be provided to protect the ice from contamination and excessive meltage.

Sanitary facilities and Control.-Each and every container must be inspected carefully to ensure that it is undamaged and without feasible flaws. These containers shall also be cleaned thoroughly using potable water containing 10 ppm available chlorine before they are used for packing fishery products. Washing and disinfection of working tables, trays, utensils and equipments.- Necessary facilities shall be provided for cleaning and disinfection of working tables, trays, utensils, cutting boards, containers, equipments and working implements which are used during processing. Utensils, trays and table tops which come in contact with unpacked material shall be washed initially with a suitable cleaning agent and finally with water containing 50 ppm available chlorine. Such cleaning and washing should be done as often as necessary.

Washing of the floor.-The processing Hall shall be cleaned before the day's work starts and then at the end of each working shift. In addition, the cleaning and washing shall be done as frequently as necessary.

Sewage and waste disposal.-There shall be suitable and adequate drainage facilities for the removal of liquid or semi-liquid wastes from the plant. There shall not be any floor area where water may collect and stagnate. Drains should be constructed of smooth and impervious material and should be designed to cope with the maximum flow of liquid without any overflowing and flooding. The drainage lines carrying water effluent except for open drain should be properly vented and if required run to a catchbasin for removal of the solid waste material. Such a basin should be located outside the processing area and should be constructed of waterproof concrete or other similar material.-The openings of open drains, if any, which pass through walls shall be fitted with metal grills to prevent the entry of rodents. The arrangements for disposal of sewage water and offal shall be done as quickly as possible and shall be such that it shall not cause any sanitary problems to the neighbourhood. The sewage from the toilet shall be disposed of in such a manner that the same shall not be accessible to flies and shall not contaminate the unit's water supply. On no account shall there be accumulation of waste or water of any kind

in the premises. Exclusion of dogs and animals from factory premises.-The dogs cats and other animals being potential carriers of disease shall not be allowed to enter or to live near the processing premises.

Toilet facility.-Adequate toilet facilities of sanitary type shall be provided. The toilets shall be provided with self-closing doors, and with wash basins and soap. Potable water shall be used for washing purposes.

Personal health and hygiene.-Plant management shall take care to ensure that no person who is either carrier of or known to be affected with a communicable disease is permitted to work in any area of the unit. In order to facilitate the detection of such disease, the management shall conduct at least yearly medical examination of personnel working in any areas of the unit. All persons working in a cannery shall maintain a high degree of personal cleanliness while on duty and shall take all precautions to prevent contamination of fishery products with any foreign substance. The management shall provide clean aprons and headgears to all employees according to the nature of their work. Gloves used in handling of fishery products shall be maintained in clean and sanitised condition and shall be made of impermeable material except where their use would be incomplete with the work involved. Workers shall wash their hands thoroughly with soap or other cleaning agent and warm water before commencing each day's work and on every occasion after visiting a toilet and before resuming work, and also on other occasion, where very necessary. Workers shall also wash their feet with potable water after each absence from the processing hall. Eating, smoking, chewing of tobacco or other materials, spitting and any such other habit which may or is likely to contaminate the product during handling and processing shall be strictly prohibited in any part of the handling and processing area. Where workers of both sex are employed, separate toilet facilities changing rooms and rest room shall be provided. Clothing and footwear not worn during working hours shall not be kept in any processing area.

Transportation facilities.-As far as possible, raw material shall be transported in an insulated/refrigerated conveyance. However, if raw material is transported in ordinary trucks, it shall be done in closed body-vehicle and the raw material shall be adequately iced. Such conveyances should be cleaned and disinfected immediately

after use and should be so maintained as not to constitute a source of contamination of the product. Cleaning of the conveyances, together with the necessary receptacles and equipments, shall be done on a routine basis. Hosing, scrubbing and cleaning of the conveyance with potable water or clean sea water to which a suitable detergent or disinfectant has been added shall be done.

Maintenance of records.-Necessary registers and records as prescribed in this regard from time to time, shall be maintained by the processor in order to ensure effective control on the processing of canned fish and fishery products and these shall be made available to the Agency officers as and when required. Specific records shall be maintained at periodic intervals of three months about the calibration of measuring and recording instruments like pressure gauge, ammeters, volt meters, weighing scales, weights etc.

3.2. In addition to the requirement mentioned at clause 3.1 above a processing unit may also arrange for the following additional facilities in their processing unit:

(a) The processing unit shall have competent and qualified personnel to supervise pre-processing and processing operations to conduct physical and organoleptic evaluation and to test for chemical factors and bacteriology of canned fish and fishery products meant for export.

(b) Such personnel should possess anyone of the following qualifications :

I. A degree/Diploma in Fishery Science/Processing from a recognised institute under a University; or

II. A degree in Science with at least two years experience in the analysis and testing of fish and fishery products.

(c) The unit shall have its own laboratory with all necessary equipments and chemicals to carry out analysis and testing of canned fish and fishery products meant for export.

(d) The unit shall have its own exclusive and separate area for processing, starting from receiving of raw material to packing.

3.3. Approval of processing units.-3.3.1 A processor intending to process canned fish and fishery products for export shall inform his intention to do so in writing, in the proforma prescribed by the

Council, to the nearest office of the Agency. On receipt of such intimation, the Agency officers shall visit the processing unit in order to adjudge the facilities for processing available in the unit. If the unit is found to have the minimum facilities as prescribed in these rules, a panel of experts constituted for this purpose by the Council shall adjudge the adequacy of the facilities in the unit and recommend its approval or disapproval to the Agency for further necessary action. Within fifteen days of receiving the recommendation of the panel, the Agency shall either approve the unit and permit it to carry out processing of canned fish and fishery products for export or not approve the same and shall not allow the processor to process canned fish and fishery products for export. After granting the approval the Agency Officer shall conduct periodic visit at regular intervals to such unit to ensure the maintenance of Panel approved arrangements. The Agency Officers also shall draw samples from units having arrangements under clause 3.2 above for bacteriological tests in the Laboratory and organoleptic examination at the unit.

3.3.2 Non-approval:- In case the unit is not approved, it shall be communicated to the processor in writing pointing out the deficiencies recorded by the Panel. A processor, after rectifying such deficiencies as pointed out by the panel, shall submit a fresh application to the Agency along with a detailed report of rectifications of the deficiencies carried out by him. On receipt of this application, the Agency shall take the steps detailed in 3.3.1 above.

3.3.3 The approval accorded at any time to a processing unit shall be withdrawn on the basis of reports received on the periodic visits and test reports on samples drawn during these periodic visits in the case of units under 3.2 above conducted by the Agency officers by giving a notice to the concerned processor after 7 days from the date of receipt of the notice by the processor for any of the following deficiencies provided no remedial measures are taken by the processor within these 7 days. If the processing equipments, machinery and storage facilities are not in good working conditions. If the sanitary and hygienic conditions of the unit are not satisfactory; If samples drawn for counter checks fail to meet the laid down standards; If the processor has violated or deliberately attempted to violate the provisions of the notification or instructions issued from time to time. In the case of approval accorded to the processor under the additional requirements at 3.2

above, it shall be withdrawn at any time provided that; If any of the deficiencies mentioned above is noticed; If complaints are received from foreign buyers regarding the quality of canned fish and fishery products exported by the processor and on investigation the same were found genuine; If 2 consecutive consignments of canned fish and fishery products have been rejected by the importing country. Such withdrawal of approval shall be intimated in writing to the processor.

3.4 Re-approval.-A unit whose approval has been withdrawn may, after rectifying the defects, make a fresh application to the Agency for getting fresh approval. For reasons given at 3.3.3 above, if at any time, there is any difficulty in maintaining conformity of the products to the specifications, or if directed by the Agency to suspend production for export, the processor shall suspend production for export under intimation to the Agency. The processing for export shall be resumed only after the same is approved by the Agency in writing.

3.5 Processing.-The processor shall carry out processing only in approved units under the supervision of competent technical personnel. Only such raw materials, which are fresh, clean, wholesome, having the characteristic appearance, odour colour and texture of species, shall be accepted for processing.

4. Inspection :-

The inspection of canned fish and fishery products meant for export shall be done by drawing samples, wherever necessary, as per Sch. II annexed hereto from the consignment for carrying out examination and testing of the same with a view to seeing that the consignment conforms to the standard specification recognised by the Central Government under Sec. 6 of the Act.

5. Basis of inspections :-

Inspection of canned fish and fishery products intended for export shall be carried out with a view to seeing that the same conforms to the specifications recognised by the Central Government under Section 6 of the Act. Either

(a) By ensuring that during the process of manufacture the quality control drills as specified in Rule 2 has been exercised. OR

(b) on the basis of inspection carried out in accordance with Rules 3 and 4 except sub-rule 3.2 of Rule 2. OR

(c) by both.

6. Procedure of inspection and certification :-

6.1 An exporter intending to export canned fish and fishery products shall submit an intimation in prescribed proforma (see Appendix I), giving particulars of consignments intended to be exported, to the nearest office of the Agency.

6.2. Every such intimation shall reach the office of the Agency not later than 4 days and 15 days in the case of consignments offered for inspection under Rule 5 (a) and 5(b) respectively before the anticipated date of dispatch of the consignments from the exporter's premises.

6.3. On receipt of the intimation under Rule 6(1) the Agency on satisfying itself on the basis of inspections carried out as provided for under Rule 5 and the instructions, if any, issued in this respect that the consignment has been processed and packed according to the standard specification applicable to it, shall issue a certificate declaring the consignment of canned fish and fishery products as export-worthy within 4 days or 15 days as the case may be :

Provided that where, the Agency is not so satisfied it shall within the period of 4 days or 15 days as the case may be refuse to issue such certificate and communicate such refusal to the exporter along with the reasons therefor.

6.4. Super inspection-Subsequent to certification, the Agency shall have the right to re-assess the quality of the consignment in the storage, in transit or at the ports. In the event of consignment being found not conforming to the standard specifications at any of these stages, the certificate originally issued shall be withdrawn.

6.5. Validity -The certificate issued shall be valid for 90 days from the date of approval of the lot. If more than one lot approved on different days are presented in one application the validity of the certificate shall be reckoned from the earliest date of approval. If the consignments are not shipped within the period of validity of the certificate, the exporter shall be permitted to present the consignment for revalidation. For this purpose the inspection fee at the notified rates shall be charged and the consignments shall be examined by drawing samples as per the sampling scale prescribed by the Council in this behalf for organoleptic inspection only. In such cases, the validity shall be extended for a further period of 30

days from the date of completion of inspection. For a consignment not shipped within the validity period mentioned in 6.5 an ad hoc extension of validity for a period not more than 15 days may be granted by the Agency, if found necessary. The inspection of canned fish and fishery products for the purpose of these Rules, shall be carried out at the premises of the processor and/or at the laboratory of Export Inspection Agency. The processor shall provide all necessary facilities to the Agency to enable them to carry out such inspection.

8. Inspection fee.-A fee the rate of (i) eight paise per kg. or part thereof when the inspection is carried out on the basis of Rule 5(a) and (c), and (ii) fifteen paise per kg. or part thereof when the inspection is carried out on the basis of Rule 5(b) shall be paid by the exporter to the Agency as inspection fee.

9. Appeal-

9.1 Any person aggrieved by the refusal of the Agency to issue a certificate of export-worthiness under Rule 6, may, within 10 days of receipt of the communication of such refusal by him prefer an appeal to a panel of Experts consisting of not less than three, but not more than 7 persons, appointed for the purpose by the Central Government.

9.2 At least two-thirds of the total membership of the panel of Experts shall consist of non-official.

9.3 The quorum of the Panel shall be three.

9.4 The appeal shall be disposed of within 15 days of its receipt. A. Specification for prawns (shrimps) canned in brine or in any other internationally approved medium or dry pack

1 Raw Material-1.1 The raw material used for preparation of prawns, shrimps, canned in brine shall be fresh, sound, wholesome, properly cleaned and free from entrails. 120 Only refined salt conforming to IS:594-1962 shall be used.

2 Cans-2 1 The material shall be packed in suitable internally and uniformly lacquered cans. The cans may also be lacquered externally subject to agreement between the purchaser and the processor. The lacquer used shall be such that it does not impart any foreign unpleasant taste and smell to the contents of the can and does not peel off during processing and storage. The lacquer shall not be soluble in brine to any extent. The can exterior shall be

free from dents, rust, perforations and seam distortions.

2.2 The cans after sealing hermetically shall not show leaking, panelling or swell. The interior of the can on opening shall not show any visible black discoloration, rust or pitting and the inside lacquer shall be in good condition.

3. Brine -3.1 The brine, if used, shall be clear and shall not be discoloured.

4. Packing and Labelling.-4.1 Only material of the same species shall be packed in a can. 4.2 The labels, if used, shall be in accordance with the rules and regulations of the country to which the material is to be exported.

5. Drained weight and size grade.-

5.1 The net drained weight of contents shall not be less than the declared weight.

5.2 The size count (Number of pieces per unit weight) shall conform to the size grade declared on the can.

6. Organoleptic quality.-

6.1 The contents of the can on opening shall present a good appearance and shall not display any appreciable disintegration. Pieces from which portions have separated out would be treated as disintegrated shrimps.

6.2 The surface of the prawns shall not appear slimy to the touch. The meat shall be soft but firm and shall not crumble to granular forms when pressed between fingers.

6.3 The prawns pieces shall not appear to be pressed together and it should be possible to separate the pieces easily. The pieces shall be of uniform size and shall be clean and free from loose hanging pieces of meat.

6.4 The material shall have the odour and flavour of fresh and cooked prawn meat and shall be free from scorched, bitter or any other objectionable flavour.

6.5 The material shall be free from pale bleached colour with a greenish yellow tint indicative of pre-processed spoilage. The material shall also be free from any black discoloration.

6.6 The material shall be free from sand, dirt, insect, hair or any

other extraneous matter. It shall be reasonably free from bits of veins, small particles and pieces of appendages.

6.7 The material shall be free from any poisonous and deleterious substances.

6.8 The cans on opening shall not give any odour indicative of bacterial spoilage, shall not show liquefaction of contents and shall not show blackening.

6.9 The products shall also conform to the following requirements :

Sl. No.	Characteristics	Requirements	Methods of test Ref. to Appendix in IS:2236 1968**	Appendix inIS:2168 1962*
(i)	Vacuum of the can in num. Min.	100	A	
(ii)	Head space of the can in mm.	5.0 to 7.5		B
(iii)	Drained weight of the contents of the can, as percentage by weight of the water capacity of the can, min.	64	B	
(iv)	Sodium chloride in brine percent (W/V) Max.	3.5	C	
(v)	Acidity of brine as citric acid (anhydrous) percent (W/V)	0.06 to 0.20	D	
(vi)	Arsenic parts per million, max.	1		C
(vii)	Lead, parts per million, max.	5		D
(viii)	Copper, parts per million, max.	10		E
(ix)	Zinc, parts per million, max.	50		F
(x)	Tin, parts per million, max.	250		G

*Specification for pomfret canned in oil. ** Specification for prawns/shrimps

canned in Brine (First Revision).

7. Bacteriological Requirements :-

7.1 The initial incubation of the sampled cans shall be done at 37°C for seven days. After this incubation, necessary quantity of the liquid portion is acceptably pipetted out and inoculated into thioglycollate cystine broth and incubated at 37°C for 48 hours. The incubated broth shall not show bacterial growth.

8. Coding. :-

8.1 The cans shall be embossed with the markings of size grade, drained weight, name of the manufacturer or his factory code, year, month, and batch of manufacture. An illustration for embossing the code in the abbreviated form is given below. T5X 1B05 T5 stands for 'Tiny' packed with 50z, drained weight. 'X' stands for the name of the manufacturer in the abbreviated form or the factory code, '1' stands for the year of manufacture, and in this illustration, it signifies the year 1981. 'B' stands for the month of manufacture (here it signifies the month of February) and '05' stands for the date of manufacture during the month. In case PUD material is used for canning, the letter 'U' shall be embossed prior to the marking for size grade. For the purpose of denoting the size grade and the drained weight, the following nomenclature shall be followed.

*(A) Size-Grade

*Pack having more than 10% broken pieces by weight irrespective of the total number of pieces in the can shall be treated as 'Broken'. Any pieces showing less than 4 segments shall be treated as broken.

(B) Drained Weight. Except in the case of 4.5 oz. pack which being the standard pack, the actual drained weight shall be embossed in oz. on the cans.

(C) The month of manufacture shall be designated as

Month	Abbreviation	Month	Abbreviation
January	A	July	G
February	B	August	H
March	C	September	J
April	D	October	K
May	E	November	L

May	E	NOVEMBER	L
June	F	December	M

B. Specification for crab meat canned in brine or any other internationally approved medium

1. Raw Material. 1.1 The meat used for canning shall be obtained from healthy freshly caught, crabs of the species as scylla serrata, protunus pelagicus, Neptunus pelagicus and Neptunus Sanguinolentus

2. Cans. 2.1 The material shall be packed in suitable internally and uniformly lacquered cans. The cans may also be lacquered externally subject to agreement between the purchaser and the processor. The lacquer used shall be such that it does not impart any foreign unpleasant taste to the contents of the can and does not peel off during processing and storing. The lacquer shall not be soluble in brine to any extent. The can interior shall be free from major dents, rust, perforations and seam distortions.

2.2 The cans after sealing hermetically shall not show leaking, panelling or swell. The interior of the can on opening shall not show any visible black discolouration, rusting or pitting and the inside lacquer shall be in good condition.

3. Brine. 3.1 Vacuum dried salt or common salt confirming to IS: 594-1962 shall be used for preparing brine. The sodium chloride content of the brine, if used, shall not exceed 2% W/V, Max.

3.2. Acidity of brine as citric acid (Anhydrous) shall be 0.20% W/V max.

4. Packing and labelling. 4.1 Crab meat shall be packed using parchment paper lining.

4.2 The body meat and claw meat of the crab shall be packed according to the terms of contract agreed upon between the buyer and the seller. In the absence of contractual specifications, the meat of the crab shall be packed on the top and at the bottom in distinct separate layers.

4.3 Only the meat of one species of crab shall be packed in a particular can. The meat obtained from crabs caught from back waters and sea shall not be mixed or packed in a particular can.

4.4 Word 'Produce of India' should be embossed on the tin.

5. Drained Weight. 5.1 The net water capacity of the can shall be

as per requirements of the importing country.

5.2 The drained weight of the meat shall not be less than the declared weight.

6. Requirements for Finished products. 6.1 The contents of the can on opening shall present a characteristic colour and odour of crab meat and shall not give any foreign odour.

6.2 The material shall be free from scorched, bitter or any objectionable flavour.

6.3 The material shall be free from stains, dirt, insect, hair or any other extraneous matter. It shall be free from veins, membrane, small particles and places of appendages.

6.4 The material shall be free from bluish colour.

6.5 The material shall be free from any poisonous and deleterious substances.

6.6 Crab Meat canned in brine should conform to the following requirements also.

Table 1: Requirements for crab meat canned in brine * Specification for Crab meat canned in brine. ** Specification for prawns/shrimps canned in brine (First revision). Table II: Limits of metallic impurities in crab meat canned in brine * Specification for pomfret canned in oil (First revision).

7. Bacteriological Requirements. The initial incubation of the sampled cans shall be done at 37°C for seven days. After this initial incubation, the brine of the cans, in inoculation into thioglycollate cystine broth and incubation at 37°C for 48 hours, shall not show any sign of bacterial growth.

8. Coding. 8.1 The can shall be embossed with the markings of the drained weight, name of the manufacturer or his factory code and year, month and date of manufacture. An illustration for embossing the code in the abbreviated form is given below : CB5X 1B05 In the above illustration "CB" stands for Crab Meat canned in brine "5" stands for drained weight and, in this illustration it signifies 5 oz. drained weight "X" stands for the name of the manufacturer in the abbreviated form or his factory code " 1" stands for the year of the manufacture and in this illustration, it signifies the year 1981. "B" stands for the month of manufacture and in this illustration, it signifies the month of February. "05" stands for the date of manufacture during the month.

The months of manufacture shall be designated as :

8.2 Drained weight. Except in the case of 4.5 oz. pack, which being the standard pack, the actual drained weight shall be embossed in oz. on the cans.

SCHEDULE 1

Levels of control

(See Rule 3)					
Sl.	Test or inspection	Requirements	Qty/No. of samples	Lot/Size/frequency	Remarks
No.	Characteristics		to be tested		
1.	2.	3.	4.	5.	6
1.	Material:				
1.1	Water	Potable quality with	250ml.	Every day	
		3-5 ppm available			
		chlorine; shall not			
		contain coliforms more			
		than 10 in 100 ml, and			
		TPC not more than			
		100/ml.			
12	Raw material:				
	Temperature	10°;C,Max	1Kg.	Every 250 kg.	
				or part thereof	
	Discolouration,	As per specifications	. 1kg.	-do-	
	Odour Black spot Foreign matter Loose shell	Bact. test for E. coli,	50gms	A day's total	For units
	Antennae etc.	Max.20/g		arrival	having
	Bact. Testing				control
		.			as per
					Clause3.2
1.3	Ice	shall be colourless,	1 sample	Each day's	

			not		
		shall not contain	less than	25 gms. receipt	
		coliforms more than			
		10 in 100 ml. & TPC			
		not more than 100/ml.			
14	Cans:				
	Rust				
	Lacquer	As per standard	100%	Each batch	
	Deformity	specification			
1.5	Cartons	As per exporter's			
		requirements	1%	-do-	
1.6	Chemical	Pure chemicals must			
		be used		Each consignment.	
2.	Processing:				
2.1	Washing	3 times Min.	100%	Each lot	
22	Blanching:				
	Concentration	As per processors		Each batch	
	of the medium	requirements			
	Duration of Dip				
	Temperature				
	of the medium -				
2.3	Grading/Count	As per standard	5%	Each code	
		specifications			
2.4	Filling weight	-do-		-do-	
2.5	Filling medium:				
	Concentration	-do-		Each Mix	
	Volume	Not less than 35% of			
		the can	5%	Each batch.	
		capacity			
2.6	Exhausting	As per			

	Time-	processor's			
	Temperature	requirements	5%	Each batch	
2.7	Seaming:				
	Leakage	-do-	-do-	-do-	
	Seam strength	-do-	2 Nos.	-do-	
2.8	Sterilisation:				
	Temperature				
	Pressure	-do-		-do-	
	Duration				
2.9	Cooking water:				
	Chlorine Content	-do-	2.5 c.c	Every one hr.	
3.	Product:				
3.1	Drained Weight	As per declared wt.			
3.2	Antennae, legs,				
	veins etc.	5 Nos. in a can max			
3.3	Foreign matter	Nil			
3.4	Broken pieces				
	percentages	10%max.			
3.5	Grade	Declared grade	As per	Each grade of a	
			Schedule	code II.	
1.	2.	3	4.	5.	6
3.6	Appearance	Characteristic			
3.7	Colour of the				
	meat	-do-			
3.8	Odour of the				
	meat	-do-			
3.9	Flavour of the				
	meat	-do-			
3.10	Texture of meat	-do-			
3.11	Discolouration				
	of meat	Nil			
3.12	Percentage of				
	salt	3.5% Max. W/V for			
		canned	As per		

		Shrimp, 2%			
		Max w/v for	Schedule II	Each grade of	
		Crabmeat.		a code	
3.13	Percentage of				
	Acidity	0.2% W/V			
3.14	Vacuum	150mm			
3.15	Head space	5 to 7.5 mm.			
3.16	Can interior				
	and exterior	Satisfactory			
3.17	Brine	Clear	-do-	For units having	
				control as per	
				clause 3.2	
3.18	Bact. Testing	No growth in			
		thioglycollate			
		broth			
4.	Packing &				
	Labelling:				
4.1	Anti-rust	As per			
	application	exporter's	100%	Each day's	
		requirements		production.	
42	Labelling	-do-	1%	-do-	
4.3	Packing in				
	cartons	-do-	1%	-do-	
4.4	Drop test *		3 packed	-do-	
			cartons		
4.5	Water	-do-			
	spraying				
	test **		-do-	-do-	
5.	Equipment				
	Control:				
	(a) Temperature indicators (b) Pressure, indicators (c) Time indicators (d) Weighing scales (e) Any other measuring	Accuracy	Each	At a pre-determined periodic frequency	History cards for each may be maintained.

SCHEDULE 2**II**

[See Rule4]

No of cartons (containing 24 cans in each) in the lot	No. of cartons to be selected
Upto 12	2*
13 to 24	3*
25 to 40	4*
41 to 80	5
81 to 120	6
121 to 180	7
181 to 250	8
251 to 350	10
351 to 500	12
501 to 750	14
751 to 1000	18
1001 to 1300	22
130 and above	25

Note (1) From each carton so selected one can shall be drawn as sample.
 (2) When cases contain more than 24 cans the number of cases shall be computed as standard cases containing 24 cans, for the purpose of using this table. (3) "The minimum number of cans to be drawn from a lot shall be 5, irrespective of the number of cartons in the lot.