

Food Safety and Standards (Packaging) Regulations, 2018

1. Short Title and Commencement. - (1) These regulations may be called the Food Safety and Standards (Packaging) Regulations, 2018.

(2) They shall come into force on the date of their publication in the Official Gazette and Food Business Operator shall comply with all the provisions of these regulations by 1st July, 2019.

2. Definitions. - (1) In these regulations unless the context otherwise requires: -

- (a) **“Act”** means the Food Safety and Standards Act, 2006 (Act 34 of 2006);
- (b) **“food grade”** means material made of substances which are safe and suitable for their intended use, and shall not endanger human health or result in unacceptable change in the composition of the food or organoleptic characteristics;
- (c) **“multilayer/composite food packaging”** means a food packaging material composed of two or more layers of same or different types of packaging materials specified under these regulations;
- (d) **“overall migration limit”** means the maximum permitted amount of non-volatile substances released from a material or article into food simulants;
- (e) **“package or container”** means a pre-packaged box, bottle, casket, tin, barrel, case, pouch, receptacle, sack, bag, wrapper or such other things in which an article of food is packed;
- (f) **“packaging material”** means materials such as cardboard, paper, glass, metal, plastic, multi-layer packaging material used for packaging of food products;
- (g) **“primary food packaging”** means packaging material in direct contact with food products;
- (h) **“secondary food packaging”** means packaging material which encloses the primary food packaging and does not come in direct contact with food products;

(i) **“specific migration limit”** means the maximum permitted amount of a given substance released from a material or article into food or food simulants.

(2) All other words and expressions used herein and not defined, but defined in the Act, rules or regulations made thereunder, shall have the meanings assigned to them in the Act, rules or regulations, respectively.

3. General Requirements. - (1) Every food business operator shall ensure that the packaging material used shall be in accordance with these regulations:

Provided where Indian Standards are not available, then relevant International Standards may be complied with.

(2) Any material which comes in direct contact with food or likely to come in contact with food used for packaging, preparation, storing, wrapping, transportation and sale or service of food shall be of food grade quality.

(3) Packaging materials shall be suitable for the type of product, the conditions provided for storage and the equipment for filling, sealing and packaging of food as well as transportation conditions.

(4) Packaging materials shall be able to withstand mechanical, chemical or thermal stresses encountered during normal transportation. In case of flexible or semi-rigid containers, an overwrap packaging may be necessary.

(5) Food products shall be packed in clean, hygienic and tamper-proof package or container.

(6) The sealing material shall be compatible with the product and the containers as well as the closure systems used for the containers.

(7) Tin containers once used, shall not be re-used for packaging of food.

(8) Plastic containers of capacity 5 litre and above and Glass bottles, which are reused for packaging of food, shall be suitably durable, easy to clean or disinfect.

(9) Printing inks for use on food packages shall conform to IS: 15495.

(10) Printed surface of packaging material shall not come into direct contact with food products.

(11) Newspaper or any such material shall not be used for storing and wrapping of food.

(12) In case of multilayer packaging the layer which comes in direct contact with food or layers likely to come in contact with food shall meet the requirements of packaging materials specified in Schedule I, II and III of these regulations.

(13) The materials listed in Schedule I, II and III of these regulations shall be compatible with their intended use as a packaging material so as not to alter the quality and safety of the food product.

(14) Every food business operator shall obtain the certificate of conformity issued by NABL accredited laboratory against these regulations for the packaging material which comes in direct contact with food or layers likely to come in contact with food to be used.

4. Specific Requirements for Primary food packaging. - (1) Paper and board materials intended to come in contact with food products-

(a) Paper and board material shall be of uniform formation, thickness and substance.

(b) It shall be free from visible specks, grease marks, cuts, pinholes and other blemishes.

(c) The paper used for the manufacture of boxes, cartons, plates, cups and paper lids or paper which are meant to be direct in contact with food shall be of food grade and shall be free from contaminants.

(d) Paper and board materials used for the manufacturing of containers for packing or storing the food products shall conform to either of the Indian Standards specifications as provided in **Schedule - I**.

(2) Glass containers intended to come in contact with food products- (a) As far as possible, they shall be free from blisters, mould marks, stones and chippings and as far as possible shall be free from cords, seeds and other visible defects.

(b) They shall have a smooth surface without cracks, pinholes and sharp edges.

(c) The sealing surface shall be free from hairline cracks and prominent seam marks.

(3) Metal and Metal Alloys intended to come in contact with food products-

(a) A utensil or container made of the following materials or metals, when used in the preparation, packaging and storing of food shall be deemed to render it unfit for human consumption: -

(i) containers which are rusty;

(ii) enamelled containers which have become chipped and rusty;

(iii) copper or brass containers which are not properly tinned.

(b) Appropriate grades of metal and metal alloys where applicable shall be used for packing or storing of food products.

(c) Metal and metal alloys used for the manufacturing of containers for packing or storing the food products shall conform to either of the Indian Standards specifications as provided in **Schedule - II**.

(4) Plastic materials intended to come in contact with food products-

(a) Plastic materials used for the manufacturing of containers for packing or storing the food products shall conform to either of the Indian Standards specifications as provided in **Schedule - III**:

Provided that Drinking Water (both Packaged and Mineral Water) shall be packed in colourless, transparent and tamper-proof bottles or containers made of polyethylene (PE) conforming to IS: 10146 or polyvinyl chloride (PVC) conforming to IS: 10151 or polyalkylene terephthalate (PET and PBT) conforming to IS: 12252 or polypropylene (PP) conforming to IS: 10910 or food grade polycarbonate conforming to IS: 14971 or polystyrene conforming to IS: 10142 or sterile glass bottles only. The transparency of a container shall not be less than 85 percent in light transmittance:

Provided also that all pigments or colorants as specified in Indian Standard IS: 9833 may be allowed in plastic containers of five litre and above made of Polycarbonate and Polyethylene Terephthalate (PET) used for packaging of mineral water and packaged drinking water. The transparency of such containers shall not be less than 85 percent in light transmittance.

¹[Provided further that food grade packaging materials as specified in regulation 4(1) to (3), which may or may not contain plastic as component compatible with

the water to be packaged may also be used. In such cases requirements of transparency would not apply.]

- (b) All packaging materials of plastic origin shall pass the prescribed overall migration limit of 60mg/kg or 10mg/dm² when tested as per IS 9845 with no visible colour migration.
- (c) Plastic materials and articles shall not release the substances in quantities exceeding the specific migration limits listed under **Table 1**.
- (d) Pigments or Colorants for use in plastics in contact with food products and drinking water shall conform to IS: 9833.
- (e) Products made of recycled plastics including carry bags shall not be used for packaging, storing, carrying or dispensing articles of food.

Substitution of highlighted provision

[(e) Products made of recycled plastics including carry bags may be used for packaging, storing, carrying or dispensing of food products as and when standards and guidelines are framed by the Food Authority. Such packaging materials shall also comply with any other national standards/regulations as applicable.]

[Operationalized w.e.f. 18th January, 2022 vide Direction F.No.STD/SC/A-40 dated 18th January, 2022

Table 1

Requirement for specific migration limits of substances from plastic materials intended to be in contact with articles of food

Sl. No.	Substances	Maximum Migration Limit (mg/Kg)
1.	Barium	1.0
2.	Cobalt	0.05
3.	Copper	5.0
4.	Iron	48.0
5.	Lithium	0.6

6.	Manganese	0.6
7.	Zinc	25.0
² [8.	Antimony	0.04
9.	Phthalic acid, bis (2-ethylhexyl) ester (DEHP)	1.5]

5. A list of suggestive packaging materials which may be used for packaging of food products falling under the specified categories is provided in **Schedule - IV**:

Provided that this is an indicative list not restricting the use of any other packaging material complying with the specified standards.

Schedule - I

Paper and board materials intended to come in contact with food products

SI. No	List of Standards
1.	Grease proof paper - IS 6622
2.	Vegetable parchment or Grease proof paper or Aluminium Foil Laminate - IS 7161
3.	Aluminium Foil Laminates for Packaging - IS 8970
4.	General purpose packing or wrapping Paper - IS 6615
5.	Folding Box Board, uncoated - IS 1776
6.	Corrugated Fibre Board Boxes- Specification (Part 1) - IS 2771

Note: The wax used for coating the paper or board shall be paraffin wax conforming to Type I of IS 4654.

Schedule - II

Metal and Metal Alloys intended to come in contact with food products

SI. No	List of Standards
1.	Cold-reduced Electrolytic Tinplate - IS 1993/ISO 11949

2.	Cold reduced Electrolytic Chromium or Chromium Oxide – Coated Steel - IS 12591/ISO 11950
3.	Wrought Aluminium and Aluminium Alloy Sheet and Strip for General Engineering – IS 737
4.	Aluminium and Aluminium Alloy Bare Foil for Food Packaging – IS 15392
5.	Specification for Crown Closures – IS 1994
6.	Specification for Round Open Top Sanitary Cans for Foods and Drinks – IS 9396 (Part 1)
7.	Specification for Round Open Top Sanitary cans for Foods and Drinks – IS 9396 (Part 2)

Schedule – III

Plastic Materials intended to come in contact with food products

Sl. No.	List of Standards
1.	Specification for Polyethylene for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 10146
2.	Specification for Polystyrene for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 10142
3.	Specification for Polyvinyl Chloride (PVC) and its copolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 10151
4.	Specification for Polypropylene and its copolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 10910
5.	Specification for Ionomer Resins for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 11434
6.	Specification for Ethylene Acrylic Acid (EAA) copolymers for their safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 11704
7.	Specification for Polyalkylene Terephthalates (PET & PBT) for their safe use in contact with foodstuffs, pharmaceuticals and drinking water - IS 12252
8.	Specification for Nylon 6 Polymer for its safe use in contact with foodstuffs,

	pharmaceuticals and drinking water – IS 12247
9.	Specification for Ethylene Vinyl Acetate (EVA) copolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 13601
10.	Specification for Ethylene Metha Acrylic Acid (EMAA) copolymers and terpolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 13576
11.	Specification for Polycarbonate Resins for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 14971
12.	Specification for Flexible Packaging Materials for packaging of Edible Oils, Ghee and Vanaspati - IS 14636
13.	Specification for Polyalkylene Terephthalates (PET & PBT) for Moulding and Extrusion – IS 13193
14.	Specification for Polyethylene Films and Sheets – IS 2508
15.	Specification for Linear Low Density Polyethylene (LLDPE) Films – IS 14500
16.	Specification for High Density Polyethylene Materials for Moulding and Extrusion – IS 7328
17.	Specification for Melamine-Formaldehyde Resins for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 14999
18.	Low Density Polyethylene Films – IS 2508
19.	Blow Moulded Polyolefin Containers - Part 2 : Over 5 Litres, Up to and Including 60 Litres Capacity – IS 7408
20.	Stretch Cling Films – IS 14995

Schedule - IV

List of suggestive packaging materials

Sl.No.	Product Category	Types of Packaging materials
1.	Milk and milk products	<ul style="list-style-type: none"> • Glass bottle with metal caps or plastic (polypropylene (PP) or High-density polyethylene (HDPE)) caps.

		<ul style="list-style-type: none"> • Rigid Plastic container made of PET with plastic (polypropylene (PP) or High-density polyethylene (HDPE)) caps. • Rigid Plastic container made up of High density polyethylene (HDPE) or Polypropylene (PP) or Polystyrene (PS) with Plastic (PP or High-density polyethylene (HDPE) caps. • Flexible plastic pouch made of polyethylene (PE) or Polypropylene (PP) based co-extruded multilayered material. • Aseptic and flexible packaging material (Paper board or Aluminium foil or polyethylene) based multilayered structure. • Tin plate container. • Paper based lined cartons with liner made of aluminium foil based laminated structure. • Plastic based polypropylene (PP) or polystyrene (PS) cups with paper or Peel-off lid. • Wax coated paper butter wrappers. • Paper and Paper Board based folding carton inside butter wrapped with butter paper. • Metal Containers with plastic polypropylene (PP) caps or metal or plastic lid. • Plastic pet container with plastic lid. • Thermoform cup or tray with paper or peel-off lids. • Paper and Paper Board setup boxes with or without lamination –plastic film inside. • Paper and Paper Board setup boxes with or without grease proof paper placed inside.
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		<ul style="list-style-type: none"> • Plastic Based multi layered flexible laminated heat sealed pouch. • Mud or clay pots. • Thermoformed Plastic container (blister pack) with aluminium foil or polyethylene (PE) based lid
2.	Fats, oils and fat emulsions	<ul style="list-style-type: none"> • Tin plate container. • Glass bottle with metal caps or plastic polypropylene (PP) or High-density polyethylene (HDPE) caps. • Plastic rigid container (jar) made of High-density polyethylene (HDPE). • Plastic bottle or Jar Polyethylene terephthalate (PET) with plastic caps. • Plastic Pouch made of Multi layered laminated or co-extruded structure. • Aseptic and flexible packaging material (Paper board or Aluminium foil or polyethylene) based multilayered structure. • Plastic laminated pouch in duplex board box (Bag in Box). • Thermoformed plastic based jar with plastic caps. • Paper based lined cartons with liner made of aluminium foil based laminated structure.
3.	Fruit & Vegetable products	<ul style="list-style-type: none"> • Glass bottle with metal caps or plastic (polypropylene (PP) or High-density polyethylene (HDPE) caps. • Aluminium can with easy open end. • Tinfoil container.

		<ul style="list-style-type: none"> • Aseptic and flexible packaging material (Paper board or Aluminium foil or polyethylene) based multilayered structure. • Plastic rigid container (jar) made of either High-density polyethylene (HDPE) or Co-extruded structure with Plastic (polypropylene (PP) or High-density polyethylene (HDPE) caps. • Stand up Pouch made up of Plastic based structure with plastic spout. • Flexible Plastic pouch made of either polyethylene (PE) or Laminated structure. • Thermoformed Plastic container (blister Pack) with aluminium foil or polyethylene (PE) based lid. • Plastic jar (Co-extruded) with metal caps. • Plastic trays with overwrap. • Polyethylene terephthalate (PET) or polypropylene (PP) or Poly Vinyl Chloride (PVC) Punnets
4.	Sweets and Confectionery	<ul style="list-style-type: none"> • Metal Containers with plastic polypropylene (PP) caps or metal or plastic lid Plastic based multilayered laminated Heat sealed pouches. • Composite containers made up of Paper Board or Aluminium foil or plastic base films with plastic or metal lids. • Plastic based rigid containers. • Foil wrap. • Plastic film based twist wraps (Polyethylene terephthalate (PET) or polypropylene (PP) or Poly Vinyl Chloride (PVC)). • Thermoformed tray and punnet with lid. • Glass bottle with metal or plastic caps.

		<ul style="list-style-type: none"> • Plastic cups with film lid.
5.	Cereals and cereal products	<ul style="list-style-type: none"> • Tin container. • Aluminium Foil Based laminated pouch in metal container. • Wrapper made of wax coated paper. • Wrapper made of three layered laminated structure. • Plastic based multilayered laminated pouch (heat sealed). • Plastic based thermoform container with plastic lid. • Lined carton with liner made of multi layered laminated structure. • Plastic based multilayered laminated structured Zipper pouch. • Thermoform trays with plastic lids or over wraps. • Glass bottle with metal caps. • Polyethylene terephthalate (PET) or Plastic based rigid containers with metal or plastic (polypropylene (PP) or High-density polyethylene (HDPE) caps • Plastic films or co-extruded film or polypropylene (PP) or polyethylene (PE)
6.	Meat and Meat Products or Poultry Products	<ul style="list-style-type: none"> • Glass jars with plastic (polypropylene (PP) or High-density polyethylene (HDPE) caps. • Metal Containers with metal lid (lacquered tin containers). • Plastic based flexible pouches in paper & paper Board carton. • Plastic based multilayered flexible laminates heat sealed pouches. • Plastic tray with overwrap.

		<ul style="list-style-type: none"> • Aluminium foil wrap. • Polyethylene terephthalate (PET) punnets or containers with plastic caps
7.	Fish and fish products or Seafood	<ul style="list-style-type: none"> • Glass jars with plastic (PP or High-density polyethylene (HDPE) caps. • Metal Containers with metal lid (lacquered tin containers). • Polyethylene terephthalate (PET) punnets or containers with plastic caps. • Plastic based multilayered flexible laminates heat sealed pouches. • Plastic tray with overwrap.
8.	Sweetening agents including Honey	<ul style="list-style-type: none"> • Glass bottle with Metal Caps or Plastic (polypropylene (PP) or High-density polyethylene (HDPE) Caps. • Plastic based Thermoformed container. • Blister Pack with foil or polyethylene lid. • Polyethylene Terephthalate (PET) container with Plastic Caps. • Plastic laminated Tube.
9.	Salt, spices, Condiments and related products	<ul style="list-style-type: none"> • Glass bottle with metal lid or plastic (polypropylene (PP) or High-density polyethylene (HDPE) caps. • Plastic based rigid container with Plastic cap (Polyethylene terephthalate (PET) and High-density polyethylene (HDPE) Containers). • Paper & Paper board or Aluminium foil or Plastic Film based Composite Container. • Folding cartons with Plastic based flexible laminated structure (heat sealed) pouch placed inside.

		<ul style="list-style-type: none"> • Plastic based multilayered layered laminated pouch (heat sealed).
10.	Beverages (other than Dairy and Fruits & vegetables based)	<ul style="list-style-type: none"> • Plastic bottles made of either Polyethylene terephthalate (PET) or Polycarbonate (PC) with Plastic (Polypropylene (PP) or High-density polyethylene (HDPE) or Aluminium caps. • Heat sealed Plastic pouches made of Polyethylene (PE). • Glass bottles with metal caps or plastic caps. • Plastic pouches made up of Polyethylene (PE) in Corrugated fibre board Boxes. • Aluminium can with easy open end. • Tin plate container. • Plastic pouch made of laminated structure. • Aseptic and flexible packaging material (Paper board or Aluminium foil or polyethylene) based multilayered structure. • Plastic based multi layered structure heat sealed pouches. • Plastic based multi layered structure heat sealed Zipper pouches or stand up pouches. • Metal Containers with plastic or Polypropylene (PP) caps or metal or plastic lid, Rigid Plastic container with plastic caps (Polypropylene (PP) Caps). • Wooden cask (for wines).

Note. - The Food Safety and Standards (Packaging) Regulations, 2018 were published in the Gazette of India, Extraordinary, Part III, Section 4 vide notification number File No. 1-95/Std/Packaging/SP(L&C/A)/FSSAI-2017, dated the 24th December, 2018 and subsequently amended vide notification numbers:

1. F. No. Std/SP-08/A-1.2019/N-01, dated 25th January 2022.

2. F.No. Std/SP-20/T(Migration-N), dated 30th August 2022.