

Saudi Standards, Metrology and Quality Org (SASO)

SAUDI STANDARDS

SASO:2020

**Polypropylene or Polyethylene food packaging containers for
multi-use**

Introduction

The Saudi Standards, Metrology and Quality Organization (SASO) has prepared the Saudi Standards for Polypropylene or Polyethylene food packaging containers for multi-use after reviewing the specifications of Arab, foreign and international standards and reviewing the related reference literature.

Polypropylene or Polyethylene food packaging containers for multi-use

1- Scope

This Saudi standard is concerned with the general requirements and characteristics of Polypropylene or Polyethylene food packaging containers for multi-use, formed by plastic processing, for food packing.

2- Normative References

- 2.1 SASO-GSO-1863:2013 Food packages - part 2 plastic packages - general requirement.
- 2.2 SASO GSO 2231:2012 General Requirements for the materials intended to come into contact with food.
- 2.3 SASO ASTM D2463/2019 Standard Test Method for Drop Impact Resistance of Blow-Molded Thermoplastic Containers.
- 2.4 BS EN 1186-1:2002 Materials and articles in contact with foodstuffs-Plastics-Part 1: Guide to the selection of condition and test methods for overall migration
- 2.5 BS EN 1186-3:2002 Materials and articles in contact with foodstuffs-Plastics-Part 3: Test methods for overall migration into aqueous food simulants by total immersion

3- Terms and Definitions

3.1 Food plastic container

Container made of plastic material and used for packaging materials to contain, retain, and protect food. It has a variety of forms.

4- Requirements

4.1 Raw Materials

Plastic containers that used for packaging and retaining food are made of Polypropylene or Polyethylene. Type and source of the raw materials used for producing PP food containers should be known and subject to SFDA requirements and in accordance with specifications mentioned in Clause

2.1 and 2.2. The material shall also comply with the threshold limits of the manufacturing residues, polymerization ingredients and auxiliary items. Usage of any recycled material must be strictly avoided to ensure that the final product complies with all the requirements of this standard.

4.2 Visual inspection

Plastic containers used for packaging and retain food shall have the following requirements:

4.3.1.1 They shall be clean, homogeneous, free of strange materials, bulges, and air pockets.

4.3.1.2 They shall not be affected, when they are shaped, closed, stored, transferred, and used; which may result in their deformation or changing their chemical and physical properties.

4.3 Design

Sizes and designs of the containers must be as per request of the consumer or the packing company. Covers shall be designed based on the design of the container top, to ensure that the container is tightly closed. Also, the design shall be considering an easy opening of the cover.

4.4 Drop Impact Resistance

The food container should not be affected after testing in accordance with the specification in item 2/3.

4.5 Material Migration

There should be no significant change in the chemical structure and the appearance of the container. The percentage of migration from surface of the container should not exceed 60 mg/kg. According to standard in items, 2.1 when tested according to the specifications mentioned in the item 2.4 & 2.5

4.6 Heavy elements

The percentage of heavy elements should not exceed as shown in Table No. (1) according to the specification mentioned in item 2/1

TABLE (1) – Heavy metals

element	Limits (max.) mg/kg
lead	2
arsenic	1
copper	5
zinc	100
chromium	1

4.7 Color

The food container shall be transparent or colored, provided that the color of the container is homogeneous and free from any apparent color differences. Colorants used should be food contact compliant and subject to SFDA requirements and in accordance with specifications mentioned in Clause 2.1 and 2.2

4.8 Size (capacity)

The package size is calculated according to the size specified by the manufacturer and recorded on it..

5- Sampling

5 samples are taken from each production batch

6- Test Methods:

The following tests shall be carried out on samples drawn in accordance with clause 5

6.1 Visual inspection.

6.2 Drop Impact Resistance

6.3 Material Migration

6.4 Size (capacity)

6.5 Determination of heavy elements.

7. Packaging and Storage.

7.1 Food container should be packed properly so as not to be affected or damaged during transportation and storage.

7.2 Containers shall be stored at good conditions away from any toxic or harmful substances and away from sources of high temperatures and pollution and at room temperature.

8. Marking

The following details must be indicated in Arabic or Arabic and English in a clear place that is difficult to remove:

8.1 Name of product

8.2 The manufacturer's name or trademark.

8.3 The country of origin

8.4 Volume (Capacity) Liter

8.5 Type of plastic.

8.6 Date & number of Production Batch

8.7 Logo of validity for food use figure (1)

8.8 Minimum & maximum temperature borne by the Container.

8.9 Warnings (if any)



(1) Figure -Logo of validity for food

References:

- 1- IS: 10910-1984: Positive list of constituents of Polypropylene and its copolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water.
- 2- COMMISSION REGULATION (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food.
- 3- Regulation of Food Packaging in Europe and the USA, ISBN 1-85957-471-8
- 4- SFDA.FD.1863 Food packages - part 2 plastic packages - general requirements.
- 5- SFDA.FD 839 Food packages - part 1 - general requirements