

PS:5344-2016
ICS No:67.100.10

PAKISTAN STANDARD SPECIFICATION
FOR

PACKAGED LIQUID MILK



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PAKISTAN STANDARDS AND QUALITY CONTROL AUTHORITY
Standards Development Centre,
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**PAKISTAN STANDARD SPECIFICATION
FOR
PACKAGED LIQUID MILK**

0. FOREWORD

- 0.1** This Pakistan Standard was adopted by the Pakistan Standards & Quality Control Authority Standards Development Centre on 25-02-106 after the draft finalized by the Milk & Dairy Products Technical Committee, had been approved by the National Standards Committee for Agriculture & Food Products.
- 0.2** This standard has drawn up to ensure uniformity in the processing of Packaged Liquid Milk.
- 0.3** In the preparation of this standard the views of the Manufacturers, Scientist, Suppliers, Consumers, Food Technologist, Testing Authorities and Shariah Scholars have been taken into consideration.
- 0.4** For the purpose of deciding whether a particular requirements of this standard is complied with final value observed or calculated expressing the result of test or analysis shall be rounded off in accordance with PS:103 for Methods of Rounding Off Numerical Value the number of significant places retained in the rounded off value, shall be the same as that of the specific value in the standard.
- 0.5** All the ingredients and processes shall be in accordance with PS:3733 for Halaal Food Management System Requirements for any organization in the Food Chain.

1. SCOPE

- 1.1** This Standard applies to the Packaged Liquid Milk to be offered for direct consumption.

2. Packaged Full Cream Milk:

Packaged full cream milk is the milk, obtained from one or more healthy halal milch animals such as cow, buffalo, camel, goat, sheep etc. It should be free from colostrum, must be pasteurized or UHT. Packaged full cream milk shall contain not less than 8.50% of milk solids non-fat (MSNF) and not less than 3.5% milk fat. Packaged full cream milk may have been adjusted by adding dairy cream, concentrated milk, dry whole milk, skim milk, concentrated skim milk or nonfat dry milk to comply with the above composition. Packaged full cream milk may be homogenized and contains the permitted food additives & nutritive supplements.

3. Packaged Low Fat Milk/Packaged Partially Skimmed Milk:

Packaged low fat milk/Packaged partially skimmed milk is the milk, obtained from one or more healthy halal milch animals such as cow, buffalo, camel, goat, sheep etc. It should be free from colostrum, must be pasteurized or UHT. Packaged low fat milk/Packaged partially skimmed milk shall contain not less than 8.50% of milk solids non-fat (MSNF) and not more than 2.0% milk fat. Packaged low fat milk/Packaged partially skimmed milk may have been adjusted by adding dairy cream, concentrated milk, dry whole milk, skim milk, concentrated skim milk or nonfat dry milk to comply with the above composition. Packaged low fat milk/Packaged partially skimmed milk may be homogenized and contains the permitted food additives & nutritive supplements.

4. Packaged Skimmed Milk:

Packaged skimmed milk is the milk, obtained from one or more healthy halal milch animals such as cow, buffalo, camel, goat, sheep etc. It should be free from colostrum, must be pasteurized or UHT. Packaged skimmed milk shall contain not less than 8.50% of milk solids non-fat (MSNF) and not more than 0.5% milk fat. Packaged skimmed milk may have been adjusted by adding dairy cream, concentrated milk, dry whole milk, skim milk, concentrated skim milk or nonfat dry milk to comply with the above composition. Packaged skimmed milk may be homogenized and contains the permitted food additives & nutritive supplements.

TABLE-I
PERCENTAGE OF MILK FAT AND MILK SOLIDS NON-FAT (MSNF) CONTENTS IN
PACKAGED LIQUID MILK

Packaged Liquid Milk Type	Milk Fat	Milk Solids Non-Fat (min.)
Packaged Full Cream Milk	3.5 % (min.)	8.5%
Packaged Low Fat Milk/Packaged Partially Skimmed Milk	2.0% (max.)	8.5%
Packaged Skimmed Milk	0.5% (max.)	8.5%

5. **CONTAMINANTS**

TABLE-II
HEAVY METALS REQUIREMENTS FOR PACKAGED LIQUID MILK

S. #	Heavy Metals	ppm
1.	Lead	2.0
2.	Arsenic	0.1
3.	Cadmium	1.0

6. **HYGIENE**

It is recommended that the products covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the PS:3944 Code of Practice *General Principles of Food Hygiene* the *Code of Hygienic Practice for Milk and Milk Products* (CAC/RCP 57-2004) and other relevant Codex texts such as *Codes of Hygienic Practice* and *Codes of Practice*. The products should comply with any microbiological criteria established in accordance with the *Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods* (CAC/GL 21-1997).

7 **LABELLING**

In addition to provisions specified in PS:1485 for Labelling of Prepackaged Foods and the General Standard for use of Dairy terms (CAC-206-1999).

8 **MARKING**

1. Name and type of the product.

The name of the product may be Full Cream Milk for Packaged Full Cream Milk and Low Fat Milk or Partially Skimmed Milk for Packaged Low Fat Milk/Packaged Partially Skimmed Milk and Skimmed Milk for Packaged Skimmed Milk.

2. Name and address of the Manufacturer.
3. Batch or Code Number.
4. Date of Manufacture and Expiry.
5. List of Ingredients.
6. Storage Instruction if required
7. Net Weight (average volume principle will be applicable)

9 **METHOD OF SAMPLING AND ANALYSIS**

See Codex Standard 234-1999.

10 **METHOD OF TEST**

The relevant Testing Method of PS, ISO, CAC and of other internationally recognized standard methods may be taken into account for analysis purpose

STANDARDS DEVELOPMENT CENTRE

(AGRICULTURE & FOOD DIVISION)

No. PSQCA/SDC-2/Pub/NSCAF/2016

Dated: 16th September, 2016.

PS:5344-2016 for Packaged Liquid Milk

AMMENDMENT No.1

Ref. Clause No.1, Page-1 (SCOPE) Read as follows:

SCOPE: This standard applies to the Packaged Liquid Milk (Pasteurized UHT) to be offered for direct consumption.

AMMENDMENT No.2.

Ref. Table-II, add S.No. 4 & 5 in Table-II, Page No.3. Read as follows:

S. No.	Heavy Metals	ppm
4.	Melamin	2.5 ppm
5.	Aflatoxin M1	0.5 ppb

AMMENDMENT No.3.

Add a new Clause No.6.1, Page-3, Read as follows:

6.1 List of Food Additives and permissible limits (See Annexure-A)

Annexure – A.

ADDITIVE	FUNCTIONAL CLASS	MAX. LIMIT
Sodium dihydrogen phosphate Disodium hydrogen phosphate Trisodium phosphate Potassium dihydrogen phosphate Dipotassium hydrogen phosphate Tripotassium phosphate Calcium dihydrogen phosphate Calcium hydrogen phosphate Tricalcium phosphate Ammonium dihydrogen phosphate Diammonium hydrogen phosphate	Stabilizer, Emulsifier, Acidity Regulator	

Magnesium dihydrogen phosphate Magnesium hydrogen phosphate Trimagnesium phosphate Disodium diphosphate Trisodium diphosphate Tetrasodium diphosphate Magnesium dihydrogen diphosphate Tetrapotassium diphosphate Dicalcium diphosphate Calcium dihydrogen diphosphate Pentasodium triphosphate Pentapotassium triphosphate Sodium polyphosphate Potassium polyphosphate Sodium calcium polyphosphate Calcium polyphosphate Ammonium polyphosphate		Max 1500 mg/Kg
Carrageenan Mono and di glycerides of fatty acids Guar gum Sodium alginate Microcrystalline cellulose Sodium carboxy methyl cellulose Guar gum Lecithin Gum Arabic	Stabilizer, Emulsifier	GMP

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