

PAKISTAN STANDARD SPECIFICATION
FOR

PACKAGED LIQUID MILK



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FOR
PACKAGED LIQUID MILK

0. FOREWORD

- 0.1** This Pakistan Standard was adopted by the Pakistan Standards & Quality Control Authority Standards Development Centre on **25-02-2016** 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 preparation, processing, packaging storage and for transportation shall be according to PS: 3733 for Halaal Food Management System Requirement for any Organization in the Food Chain.

1. SCOPE

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

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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 supplement and shall be free from added preservatives.

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 and shall be free from added preservatives.

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, and nutritive supplements and shall be free from added preservatives.

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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

CONTAMINANTS REQUIREMENTS FOR PACKAGED LIQUID MILK

S. #	Contaminants	ppm
1.	Lead	2.0
2.	Arsenic	0.1
3.	Cadmium	1.0
4.	Melamin	2.5
5.	Aflatoxin M1	0.5 ppb

5.1 **Microbiological Requirements Guideline**

The products shall comply with any rational microbiological criteria or established in accordance with the Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods (CAC/GL 21-1997). The microbiological criteria given as guideline requirements in Table-III.

Table-III

	Microbial Limits
TPC (CFU/ml)	<50000
<i>Staph Aureus</i> (CFU/ml)	<100
Coliform (CFU/ml)	<10
Fecal Coliform (CFU/ml)	<10
<i>E. coli</i> (CFU/ml)	<10
<i>Listeria monocytogens</i> (CFU/25ml)	Absent
<i>Salmonella</i> (CFU/25ml)	Absent

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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.
