

**PS**  
**614-1980**  
**(1<sup>ST</sup> REVISION)**  
**(UDC 664.681.2)**

# **PAKISTAN STANDARD**

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## **SPECIFICATION FOR WAFER BISCUITS (1<sup>ST</sup> REVISION)**



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**PAKISTAN STANDARDS INSTITUTION,**  
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**PAKISTAN STANDARD SPECIFICATION  
FOR  
WAFFER BISCUITS (1<sup>ST</sup> REVISION)**

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**PAKISTAN STANDARD SPECIFICATION****FOR****WAFER BISCUITS  
(1<sup>ST</sup> REVISION)****0 FOREWORD**

**0.1** This revised Pakistan Standard was adopted by the Pakistan Standards Institution on 28<sup>th</sup> May, 1980 on the endorsement by the Chemical Divisional Council of the draft finalized on 16<sup>th</sup> December, 1979 by the cereals, pulses and their products Sectional Committee.

**0.2.** The demand for wafers suitable for serving with ice-cream or for the production of plain, filled or coated wafers is gradually on the increase. In the manufacture of wafers, the consistency and composition of the batter, mixing time, baking time and temperature are of considerable importance.

**0.3** This standard was first published in 1966. Keeping in view the latest technological and trade advances the committee felt that this be revised. In the revision, scope of the standard has been enlarged to cover Wafers, of all shapes and separate requirements have been specified for plain and modified wafers. List of ingredient used for the manufacturer has been enlarged to include all the material being used at present.

**0.4** Pakistan Standard Specification for Biscuits (Excluding Wafer Biscuit) PS:383-1980 is a necessary adjunct to this standard.

**0.5** In the preparation of this revised standard the assistance derived from IS:2397-1972 Wafer Biscuit is acknowledged with thanks.

**0.5.1** For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with PS:103-1960. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

**1. SCOPE :**

**1.1** This standard prescribes the requirements and the methods of sampling and test for wafers.

**2. TYPES :**

**2.1** The wafer shall be of two types, namely (a) Plain and (b) Modified.

**3. ESSENTIAL INGREDIENTS :**

**3.1** The following materials shall be used in the preparation of batter of Wafers.

- (a) **MAIDA** – Conforming to PS:381-1964 Specification for maida.
- (b) **Water** – Potable.

**4. OTHER INGREDIENTS :**

**4.1** In addition to the essential ingredients specified under 3, any of the following ingredients may be added to the wafer batter :

- (1) Antioxidant (those Permitted PF Rules);
- (2) Baking powder and other leavening agents ;
- (3) Cereals ;
- (4) Chocolate ;
- (5) Citric acid ;
- (6) Cocoa powder ;
- (7) Colouring matter, edible (those permitted in PF Rules);
- (8) Desiccated coconut ;
- (9) Dextrose ;
- (10) Dry Fruits and nuts ;
- (11) Edible common salt ;
- (12) Eggs;
- (13) Emulsifying agents (those permitted in PF Rules);
- (14) Enzymes ;
- (15) Fat or shortening-hydrogenated edible oil, refined edible oil, bakery shortening, butter, margarine, butter oil, or mixture of two or more of these ;
- (16) Flavouring essences ;
- (17) Flavour improvers and fixers ;
- (18) Flour improvers ;
- (19) Ginger ;
- (20) Gluten ;
- (21) Edible oilseed flour, expeller pressed or solvent extracted ;
- (22) honey ;
- (23) Jellifying agents ;
- (24) Liquid glucose ;
- (25) Malt products ;
- (26) Milk products, such as butter milk powder, cheese, milk powder, condensed milk casein etc ;
- (27) Nutrients – accepted ;
- (28) Oilseeds and their products ;
- (29) Spices ;
- (30) Starches, edible ;
- (31) Sugar and sugar products ;
- (32) Wheat atta ; and
- (33) Yeast.

## 5. REQUIREMENTS

**5.1** Wafers shall be properly baked and shall not show signs of underbaking or overbaking. They shall be crisp, crunchy and light in texture. The design impressed on them, if any shall be clear. They shall have an agreeable odour typical of well-baked wafers, and shall be free from soapy or other objectionable flavours, insect and fungus infestation.

**Note :** - The appearance, taste and odour shall be determined by organoleptic test.

**5.1.1** Plain Wafer – Plain wafer may be hollow or flat in any shape desired by the purchaser.

**5.1.2** Modified Wafer – These shall be following two types.

**5.1.2.1** “Sandwiched Wafers. – It shall have two or more plain wafers, sandwiched with filling in between. The filling may be of cream, jam, jelly, marshmallow, caramel, dry fruits chocolate, cocoa, cheese, spices and other ingredients of nutritional value”.

or the like and shall be not less than 20 percent by weight of the filled wafer.

**Note :** - For the purpose of this standard, ‘cream’ means a homogenous mixed preparation of hydrogenated fat, or bakery shortening, icing sugar, flavours and permitted food colours with or without other ingredients in small proportions.

**5.2** The wafers shall be manufactured in premises maintained under hygienic conditions.

**5.3** The wafers shall also comply with the requirements given in Table I.

**TABLE 1**  
**REQUIREMENTS FOR WAFER BISCUITS (Clause 5.3 and 8.1)**

Sl. No.	Characteristic	Requirement		Method of test (Ref. To Appendix in PS:383-1980)
		Plain	Modified	
1	2	3	4	5
(i)	Moisture, percent by mass, Max	4.5	5.5	B
(ii)	Acid insoluble ash (on dry basis), percent by mass, Max.	0.05	0.05	C
(iii)	Acidity of extracted fat (as oleic acid), percent by mass, Max.	1.0	1.0	D

## 6. PACKING AND MARKING :

**6.1** Packing-Wafers shall be packed in clean, sound containers made of tinplate, pack-rolled cold reduced carbon steel (PCRC) sheets, cardboard, paper or other material as agreed to between the purchaser and the vendor, in such a way as to protect them from contamination and from absorption of moisture. They shall not come in direct contact with a packing material other than clean greaseproof or sulphite paper, cellulose film or other non-toxic packing material which may be covered with a moisture-proof laminate or coated paper.

## **PS:614 : 1980**

**6.2** Marking – The following particulars shall be clearly and indelibly marked or labelled on each container :

- (a) Name or trade name and type of the material.
- (b) Name of the manufacturer,
- (c) Batch or code number,
- (d) Number of wafers, and
- (e) The statement ‘Contains permitted flavouring and colouring agents.

**6.2.1** Each container may also be marked with the PSI Certification Mark.

## **7. SAMPLING :**

**7.1** Representative samples of the material shall be drawn as prescribed in Appendix A of PS:383-1980.

## **8. TEST**

**8.1** Test shall be carried out as prescribed in the appropriate appendices specified in col.5 of Table I.

**8.2** Unless specified other wise pure chemicals shall be employed in test, and distilled water shall be used where the use of water a reagent is intended.