

PS

1561: 1983

(U.D.C.: 665.353.3)

PAKISTAN STANDARD

SPECIFICATION FOR PALM OIL EDIBLE GRADE (for cooking purpose)



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PAKISTAN STANDARDS INSTITUTION,
39 – Garden Road, Saddar,
Karachi-74400.**

PAKISTAN STANDARD SPECIFICATION

FOR

**PALM OIL EDIBLE GRADE
(for cooking purpose)**

**OIL SEEDS & THEIR ALLIED PRODUCTS SECTIONAL
COMMITTEE**

SL: #	CHAIRMAN	ORGANIZATION
1.	Mr. M.A. Bari	Government Public Analyst, Multan Region, Multan.
	MEMBERS	
2.	Col. Mohammad Ayub Khan	Commanding Officer, Armed Forces Institute of Nutrition, Lahore Cantt.
3.	Dr. Mohammad Yaqoob Malik	Incharge, Nutrition Section, College of Veterinary Science, Lahore.
4.	Mr. Mohammad Saleem	Acting Chief, Nutrition Division, National Institute of Health, Islamabad.
5.	Dr. S.A. Khan (for Lahore)	Chief Scientific Officer, PCSIR Laboratories, Ferozepur Road, Lahore-16
6.	Mr. S.A.Haq (for Karachi)	Principal Experimental Officer, PCSIR Laboratories off University Road, Karachi.
7.	Director	Central Testing Laboratories, Block No.77, Pak. Secretariat, Karachi.

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8. Director
Food Agro based & Misc. Directorate,
Deptt. of Investment Promotion Bureau,
Kandawala Building,
M.A. Jinnah Road,
Karachi.
9. Mr. I.H Pervaiz
Information Officer,
Services Facilities Directorate,
Export Promotion Bureau,
2nd Floor, Press Trust House,
I.I. Chundrigar Road,
Karachi.
10. Director
Pakistan Central Cotton Committee,
Moulvi Tamizuddin Khan Road,
Karachi.
11. Marketing Adviser
Agriculture & Livestock Products Marketing &
Grading Deptt.,
4th & 5th Floor,
Jamil Chamber,
262-A.M.
Saddar, Karachi.
12. Chairman
Trading Corporation of Pakistan Ltd.,
Press Trust House, I.I. Chundrigar Road,
Karachi.
13. Director
Agricultural Research Institute,
Tarnab, Peshawar.
14. Mr. A. Rashid
Technical Manager,
Lever Brothers Pakistan Ltd.,
Mackinon's Building, I.I. Chundrigar Road,
Karachi.
15. Wing Commander (Rtd.).
Mr. A. Habib Ahmed
Pakistan Vanaspati Manufactuers Association,
404-Mohammadi House,
Karachi.
16. Dr. Mohammad Iqbal Khan
Director,
Oilseeds Research Institute,
Faisalabad.

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17. Mr. Altaf Hussain Chaudhry
Oilseeds Botanist,
Agricultural Research Institute,
Tandojam.
18. Mian Nishat Ahmed (Chairman),
M/s. Fatima Enterprises Ltd.,
966-B, Mumtazabad,
Multan.
Representatives of Pakistan Cooking Oil
Manufacturers Association.
19. Mr. Mohammad Ali Bhatti, --do--
M/s. Punjab Cooking Oil Ltd.,
54-Shahrah-e-Quaid-e-Azam,
Lahore.
20. Mr. Riaz Ahmed, --do--
M/s. EFFEF Industries Ltd.,
Khanewal Road,
Kabirwala.
21. Mian Rafi Monnoo, --do--
C/o. Adil Brothers,
3rd Floor, Habib Bank Ltd.,
Building, Bank Square,
Faisalabad.
22. Dr. Nasir Saeed Butt,
General Manager (T&O),
Ghee Corporation of Pakistan Ltd.,
5-Bank Square, Lahore.
Representative of Ghee Corporation of Pakistan
Ltd.,
23. Mr. G. Dastagir, --do--
General Manager (DI&T),
Ghee Corporation of Pakistan Ltd., 5—Bank
Square, Lahore.
24. Mr. Shahabuddin, Senior Manager (T&O),
Ghee Corporation of Pakistan,
National Bank of Pakistan Building,
Karachi.
Representatives of Ghee Corporation of Pakistan
Ltd.,

Ghee Corporation of Pakistan Units

25. Mr. A.B. Soomro --do--
Managing Director,
Wazir Ali Industries,
Hali Road,
Hyderabad.

PAKISTAN STANDARDS SPECIFICATION**FOR****PALM OIL EDIBLE GRADE****(for cooking purpose)****0. FOREWORD**

0.1 This Pakistan Standards was adopted by the Pakistan Standards Institution on 27th March, 1983 on the endorsement by the Chemical Divisional Council of the draft finalized by the Oilseeds & their Allied Products Sectional Committee on 7th & 8th November, 1982.

0.2 Palm oil is obtained from the fruits of Oil Palm tree (*Elaeis guineensis*). It is obtained from the outer flesby part of the pulp called mesocarp.

0.3 In preparation of this standard, the views of the manufacturers, technologists and testing authorities etc., have been taken into consideration.

0.4 The final value, expressing the results of a test or analysis, shall be rounded off in accordance with PS:103-1960 "Methods of Rounding off Numerical Values". The number of significant places retained in the rounded off value shall be the same as that of the specified value in the standard.

1. SCOPE

1.1 This standard prescribes requirements and methods of sampling and test for palm oil edible grade (for cooking purpose).

2. TERMINOLOGY

2.1 For the purpose of this standard, the following definition in addition to the definitions given, under 2 of PS:56-1961 shall apply.

2.1.1 Palm Oil Edible Grade (for cooking purpose) shall be obtained chemically or physically by refining, bleaching and deodorizing. No harmful, Chemicals shall be used in the manufacture.

3. REQUIREMENTS

3.1 Description. - The material shall be obtained from the fleshy mesocarp of the fruit of the oil palm tree (*Elaeis guineensis*) by a suitable process of extraction.

3.2 The material shall be clear on melting and free from rancidity, adulterants, sediments, suspended and other foreign matter, separated water, and added colouring or flavouring substances and shall have acceptable taste and odour. It may contain permitted antioxidants in specified quantities (as certain antioxidants are allowed as laid down by the Codex Alimentarius Commission Standard).

3.2.1 The clarity of the material shall be judged by the absence of turbidity after keeping the filtered sample at 50°C for 24 hours.

3.3 Admixture with other oils. – The material shall be free from admixture with mineral or other oils of vegetable or animal origin when tested according to the methods prescribed in PS:56-1961.

3.4 The material shall also comply with the requirements given in Table I.

4. PACKING

4.1 The product shall be packed in suitably sealed & well closed containers made from food grade material.

5. MARKING

5.1 The containers shall be marked with the following particulars :-

- (i) Name of the material in Block letter e.g. PALM OIL EDIBLE GRADE (for cooking purpose).
- (ii) Date of manufacture (coded or otherwise).
- (iii) Name & address of manufacturer & trade mark if any.
- (iv) Net weight/volume of the content in Kg/Litre, and
- (v) Pakistan Standard Number.

5.1.1 No label declaration, methods of preparation and publicity concerning the product, shall be made in a manner likely to mislead the purchaser and/or consumer as to the true nature or composition of the product as a whole.

**TABLE I. – REQUIREMENTS FOR PALM OIL EDIBLE GRADE
(for cooking purpose)
(Clause 3.4)**

Sl.No.	CHARACTERISTICS	REQUIREMENTS	REFERENCE TO CLAUSES OF PS:56-1961 METHOD OF SAMPLING & TEST FOR VEGETABLE OILS AND FATS
(1)	(2)	(3)	(4)
(i)	Moisture and insoluble impurities, percent by wt. Max	0.10	5
(ii)	Colour in a 1-in cell on lovibond scale express as (Y + 10R), Max.	60	12
(iii)	Refractive index *at 50 °C	1.4491 to 1.4552	9
(iv)	Saponification value	195 to 205	14
(v)	Iodine value (wijs)	50 to 55	13
(vi)	Free fatty acids (as oleic acid percent by weight, Max	0.25	6

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(vii)	Unsaponifiable matter, percent by weight, Max.	1.2	7
(viii)	Melting point °C, Max. (Open capillary slip method).	37	8
(ix)	Peroxide value, expressed as milliequivalents oxygen per kg. Max.	10	E of PSS:221-1981.
(x)	Rancidity (Kries Test)	Negative	18 PS:56-1961
(xi)	Vitamin A i.u.per kg. of finished product, Min.	33,000	B of PSS:221-1981

*This corresponds to Butyro Refractometer (BR) reading of 35.5 to 44.0 at 50 °C.

6. SAMPLING

6.1 Representative samples of the material shall be drawn as prescribed under PS:56 – 1961.

7. TEST METHODS

7.1 Test should be carried out in accordance with the methods prescribed in PS:56 – 1961 and PS:221 – 1981.

7.2 Quality of Regents. – Unless specified otherwise, analytical grade chemicals and distilled water (PS:593 – 1966) shall be used in tests.

NOTE : - Analytical Grade Chemicals shall mean chemical that do not contain impurities which affect the result of analysis.