

PAKISTAN STANDARD SPECIFICATION  
FOR

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**CONCENTRATED FRUIT JUICE**  
**(2<sup>ND</sup> REVISION)**



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**PAKISTAN STANDARDS AND QUALITY CONTROL AUTHORITY**  
Standards Development Centre,  
PSQCA complex, Standardization Wing II, 1<sup>st</sup> Floor, Plot - ST-7/A, Block-3,  
Scheme No.36, Gulistan-e-Jauher, Karachi

(i)

**PAKISTAN STANDARDS & QUALITY CONTROL AUTHORITY**  
**(STANDARDS DEVELOPMENT CENTRE)**  


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**(AGRICULTURE & FOOD DIVISION)**

**MEMBERSHIP LIST OF FRUIT & VEGETABLE PRODUCTS TECHNICAL COMMITTEE**

**CHAIRPERSON**

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|----|--|---|
| 1. | Mr. Sohail Anwar,<br>General Manager Regulatory Affairs, | Qarshi Industries Ltd.,<br><b><u>Hattar (KPK)</u></b> |
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**MEMBERS**

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| 2.  | Director (Post Harvest)                     | Ayub Agriculture Research Institute<br>Post Harvest (Research)<br><u>Faisalabad.</u>                 |
| 3.  | Dr. Masood Siddiq Butt,<br>Director General | National Institute of Food Sciences &<br>Technology University of Agriculture,<br><u>Faisalabad.</u> |
| 4.  | Director General                            | PCSIR Laboratories Complex,<br>Off University Road,<br><u>Karachi.</u>                               |
| 5.  | Director General,                           | Agriculture Research Institute,<br><br><u>(Sindh).</u>   |
| 6.  | Director General,                           | Agriculture Research Institute,<br>Sariab <u>Quetta.</u>   |
| 7.  | Director General,                           | Agriculture Research Institute,<br>Ternab,<br><u>Peshawar.</u>                                       |
| 8.  | Surgeon General,                            | AGS Br. (Med Dte). G. H. Q.,<br><u>Rawalpindi</u>  |
| 9.  | Director,                                   | Horticulture Research Institute,<br>PARC (NARC,) Chuck Shahzad,<br>P.O. (NARC),<br><u>Islamabad</u>  |
| 10. | Director,                                   | Horticulture Research Institute,<br><u>Mirpurkhas (Sindh).</u>                                       |

(ii)

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| 11. | The Govt. Public Analyst   | Public Health Laboratory,<br>Western By pass Opp. Chest &<br>General Hospital, <u>Quetta</u> .                       |
| 12. | Govt. Public Analyst   | Food Laboratory<br>Directorate General<br>Health Services<br>Sindh Old building<br>Wahdat Colony, <u>Hyderabad</u> . |
| 13. | Govt. Public Analyst   | Food Laboratory<br>Hayatabad, <u>Peshawar</u>  |
| 14. | Mrs. Kishwar Shabina<br>Public Analyst,                                      | KMC Food Laboratory,<br>Jigar Muradabadi Road<br><u>Karachi</u> .  |
| 15. | Mr. Sikandar Shahzad,<br>Corporate Regulatory & Scientific<br>Affair Manager | Nestle Pakistan Ltd,<br>Shaikhupura Road,<br><u>Lahore</u> .   |
| 16. | Dr. Sarfaraz Ahmed, ,<br>Manager Regulatory Affairs,                         | Engro Foods Ltd.,<br><u>Lahore</u> .   |
| 17. | Executive Director   | Mitchels Fruit Farms Ltd,<br>Renala Khurd, <u>Okara. (Punjab)</u>  |
| 18. | Mr. Muneer Ahmed,<br>Quality Assurance Manager                               | National Foods Ltd,<br>B-46, S.I.T.E, <u>Karachi</u> .   |
| 19. | Mr. Naeem Shahid,<br>Chief Executive,  | Halaal Foundation,<br>Gulshan-e-Maymar,<br><u>Karachi</u>  |
| 20. | Mr. Waseem A. Mohmood,<br>Director Marketing                                 | Shezan Int. Ltd.<br>56- Bund Road, Lahore - 54500<br><u>Lahore</u>   |
| 21. | Mr. Zuzzer A. Shamsuddin,<br>Consultant,                                     | Hamilton Court,<br>Clifton Road, <u>Karachi</u> .  |
| 22. | Quality Assurance Manger   | Pepsi Cola International<br>Industrial Estate (Raiwind)<br><u>Lahore</u>   |
| 23. | Managing Director  | United Kings Foods (Pvt) Ltd.,<br>North Karachi Industrial Area<br><u>Karachi</u>                                    |

(iii)

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| 24. | Mr. Tajamul Hussain                            | Naurus Pak (Pvt) Ltd.,<br>Naurus Chowrangi SITE<br><u>Karachi.</u>      |
| 26. | Manager Quality Assurance<br>Development,      | Shangrila (Pvt.) Ltd.,<br>Bahadurabad<br><u>Karachi.</u>                |
| 27. | Ms. Ammar Qureshi,                             | Unilever Pakistan (Pvt.) Ltd.,<br>Fatima Jinnah Road<br><u>Karachi.</u> |
| 28. | Mr. Qasim Mahood,<br>Quality Assurance Manager | The Cocacola Export Corporation,<br>Gulberg III, <u>Lahore.</u>         |
| 29. | Director                                       | Quality Control Centre<br>PSQCA,<br><u>Karachi.</u>                     |

**SECRETARIATE:**

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|----|---|---|
| 1. | Mr. Naseem-us-Sami<br>Deputy Director (Agri. & Food) &<br>Secretary to the Committee, | Standards Development Centre,<br>PSQCA,<br><u>KARACHI</u> |
| 2. | Ms. Yasmin Khanam<br>Examiner (Agri. & Food)  | Standards Development Centre,<br>PSQCA,<br><u>KARACHI</u> |
| 3. | Engr. Lal Muhammad Rajar<br>Examiner (Agri & Food)                                    | Standards Development Centre,<br>PSQCA,<br><u>KARACHI</u> |
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**PAKISTAN STANDARD SPECIFICATION  
FOR  
CONCENTRATED FRUIT JUICE  
(2<sup>nd</sup> REVISION)**

**0. FOREWORD:**

- 0.1 This Pakistan Standard was adopted by the Pakistan Standard and Quality Control Authority, Standard Development Centre on 25-02-2016 after the draft finalized by the Fruit and Vegetable Products Technical Committee, had been approved by the National Standards Committee for Agriculture and Food Products.
- 0.2 This standard has been drawn up to ensure uniformity in the quality of Production of concentrated fruit juice.
- 0.3 In the preparation of this standard the views of the manufactures, consumers, food technologists and testing authorities were taken into consideration.
- 0.4 Methods of sampling and test for Fruit & Vegetable products (PS: 630) is necessary adjunct to this standard for reference to the methods of sampling & test.
- 0.5 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 analysis, shall be rounded off in accordance with Methods of Rounding off Numerical values the number of significant places retained in rounded off/value PS: 103 shall be the same as that specified value in this Standard.
- 0.6 This Standard is intended chiefly to cover the technical provisions relating to the supply of the material and it doest not purport to include all the necessary provisions of a contract.
- 0.7 All the ingredients preparation, processing packaging, storage and/or transportation shall be in accordance with PS: 3733 for Halaal Food Management System Requirements for any Organization in the food Chain.

**(2)****1 SCOPE**

- 1.1 This Pakistan Standard prescribes the general requirements for Concentrated Fruit Juice.

**2.0 REQUIREMENTS**

- 2.1 **Fruit juice from concentrate** by reconstituting concentrated fruit juice defined below, with potable water that meets the criteria described in Clause 2.2.

**2.1.1 Concentrated Fruit Juice**

Concentrated Fruit Juice is the unfermented but fermentable liquid obtained from the edible part of sound appropriately mature and fresh fruit or of fruit maintained in sound condition by suitable means except water has been physically removed in an amount sufficient to increase the Brix level to a value at least 50% greater than the Brix value established for reconstituted juice from the same fruit, as indicated in the Annex. of PS: 4973. In the production of juice that is to be concentrated, suitable processes are used and may be combined with simultaneous diffusion of the pulp cells or fruit pulp by water; provided that the water extracted soluble fruit solids are added in-line to the primary juice, before the concentration procedure. Fruit juice concentrates may have restored<sup>1</sup> aromatic substances and volatile flavor components, all of which must be obtained by suitable physical means, and all of which must be recovered from the same kind of fruit. Pulp and cells<sup>2</sup> obtained by suitable physical means from the same kind of fruit may be added.

- 2.2 For reconstituted juice and nectar, the potable water used in reconstitution shall, at a minimum, meet the latest edition of the PS: 1932 for Drinking Water.
- 2.3 Permitted colors and preservatives may be added as limited by Codex Standard 247 and GSFA Food Category 14.1.2.3.

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<sup>1</sup> Introduction of aromas and flavors are allowed to restore the level of these components up to the normal level attained in the same kind of fruit.

<sup>2</sup> For citrus fruits, pulp or cells are the juice sacs obtained from the endocarp.

**(3)****3.0 CONTAMINANTS****3.1 PESTICIDE RESIDUES**

The product covered by the provisions of this Standard should comply with those maximum residue limits for pesticides established by the Codex Alimentarius Commission for this product and PS: 2023 for Maximum limits for Pesticide Residues.

**3.2 OTHER CONTAMINANTS**

The product covered by the provisions of this Standard should comply with those maximum levels for contaminants established by the Codex Alimentarius Commission for this product.

**4. HYGIENE**

4.1 It is recommended that the product covered by the provisions of this Standard be prepared and handled in accordance with the appropriate clauses of the PS: 3944 for Code of Practice – General Principles of Food Hygiene.

4.2 The products shall comply with any MICROBIOLOGICAL CRITERIA established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997) or may apply following limits.

**MICROBIOLOGICAL LIMITS**

<b>S #</b>	<b>Organisms</b>	<b>Recommended Permissible Limit</b>
<b>1</b>	<b>Total coliform</b>	<b>&lt; 10 CFU / ml</b>
<b>2</b>	<b>Yeast &amp; molds</b>	<b>&lt; 10 CFU / ml</b>
<b>3</b>	<b>Sterility test</b>	<b>Nil</b>

} **Applicable for  
Pasteurized  
Juices**

} **Applicable for  
Sterile Juices**

**(4)**

**5. PACKING AND MARKING**

The product shall be packed in sealed & hygienically suitable container.

The following particular shall be clearly declared on each container:

1. Name of the product in block letters indicating the fruits used.
2. Net content of the material in the container in ml.
3. Batch or code.
4. Name & address of the manufacturer.
5. Date of manufacture & expiry.
6. Pakistan Standard number Mark, and License number.

**6.0 LABELLING**

The Pakistan Standard for the Labeling of Prepackaged Foods (PS: 1485) shall apply.

**7.0. TEST METHOD:**

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

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