

PHILIPPINE NATIONAL STANDARD

PNS/BAFPS 81:2010
ICS 67.180.10

Raw cane sugar – Specification



BUREAU OF PRODUCT STANDARDS

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Foreword

Sugar is a leading export earning crop of the Philippines. Despite fluctuating prices, global market trends show an increased production and demand for safe and quality raw and white sugar. Consequently, the Department of Agriculture through the Bureau of Agriculture and Fisheries Product Standards (BAFPS) and Sugar Regulatory Administration (SRA), initiated the revision of the Philippine National Standards for Raw Cane (PNS 1097:1993) and White Sugar (PNS 1098:1993) to help boost the local sugar industry and ensure that the locally produced and traded sugars meet the current international standards of safety and quality.

The Technical Working Group (TWG) composed of BAFPS, SRA, Philippine Sugar Millers Association (PSMA) and representative from First Farmers Holding Corporation took into considerations provisions of the Codex Standard for Sugars (CODEX STAN 212-1999 (Amd. 1-2001), International Commission for Uniform Methods of Sugar Analysis (ICUMSA) new methods, new SRA data analysis, BFAD rules and regulations, and comments from all stakeholders (e.g. producers/growers, millers, refiners, traders, bottlers, consumers) in all public consultations held in Bacolod, Cebu, Davao and Manila.

This standard sets a series of minimum requirements to be observed in the production and sale of raw cane sugar as well as essential composition and quality factors, including methods of analysis, necessary for government regulatory activity, consumer protection and fair trade.

Raw cane sugar – Specification

1 Scope and description

This standard applies to the raw cane sugar intended for human consumption. It also includes raw cane sugar sold for further processing/refining or as ingredients in foodstuffs.

Raw cane sugar is partially purified sucrose, which is crystallised from partially purified cane juice, without further purification, but which does not preclude centrifugation or drying, and which is characterised by sucrose crystals covered with a film of cane molasses.

2 Food additives

Raw cane sugar may contain sulphur dioxide at a maximum permitted level of 20 mg/kg.

3 Contaminants**3.1 Heavy metals**

Raw cane sugar shall be free from heavy metals in amounts which may represent a hazard to human health.

3.2 Pesticide residues

Raw cane sugar shall comply with those maximum residue limits established by the Codex Alimentarius Commission (CAC) for this commodity.

4 Hygiene

It is recommended that the product covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice – General Principles of Food Hygiene recommended by the Codex Alimentarius Commission (CAC/RCP 1-1969 Rev. 4-2003) and other relevant Codes of Hygienic Practices. Provisions of the Revised Guidelines on Current Good Manufacturing Practices, Packing, Repacking, or Holding Food (BFAD Administrative Order No. 153 s. 2004), including Inspection Checklist for Sugar Millers/Refiners should apply.

Raw cane sugar should 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) and BFAD Guidelines for the Assessment of Microbiological Quality of Processed Foods (BFAD Bureau Circular 01-A s. 2004).

5 Labelling

In addition to the provisions of the General Standard for the Labelling of Pre-packaged Foods (CODEX STAN 1-1985, Rev 6. 2008), provisions of the Consumer Act of the Philippines (RA7394), Rules and Regulation Governing the Labeling of Prepackaged of Food Products Distributed in the Philippines (BFAD AO 88-B s.1984) and other existing BFAD rules, regulations and resolutions, the following specific provisions shall apply:

5.1 The name of the food

The product covered by this standard must conform to the description given for that product in clause 1 of the standard.

5.2 Additional labeling requirement

Raw cane sugar intended for direct consumption shall be directly bagged and properly labeled (i.e. for direct consumption).

6 Methods of analysis and sampling

See Volume 13 of the *Codex Alimentarius* and other relevant *International Commission for Uniform Methods of Sugar Analysis (ICUMSA) methods* specified in Table 1 of Annex.

Annex

1. Essential composition and quality factors including methods of analysis

The composition and quality factors for the sugars covered by the standard are set out in table 1.

Table 1 Composition and quality factors for raw cane sugar characteristics	Specification as produced	Methods of analysis
Polarization, percent, minimum	97.4	ICUMSA GS 1/2/3/9-1(2007)
Safety factor, maximum	0.3	ICUMSA GS 2/1/3/9-15(2007)
Color (ICUMSA color Units), maximum	Affined raw 1300 Whole raw 5000	ICUMSA Modified Method 4
Grain size, percent through 28-mesh Tyler sieve, maximum	Maximum 45	U.S. Contract Method Form 2021-91G(Domino Corp.)
Ash content, percent of raw sugar	Minimum and maximum standard ash content is derived by multi-plying percent non-sucrose solids by the factor listed below which corresponds to the final polarization of the cargo: Min. Max. Up to and including 98.0 0.17 0.25 Over 98.0 up to and including 98.2 0.18 0.26 Over 98.2 up to and including 98.4 0.19 0.27 Over 98.4 up to and including 98.6 0.20 0.28 Over 98.6 up to and including 98.8 0.21 0.29 Over 98.8 up to but not including 99.0 0.22 0.30	ICUMSA GS 1-10(1998) Single Sulphation
Dextran	Not exceeding 400 ppm	ICUMSA GS1-15(2007) Modified Alcohol Haze Roberts Method
Sulphur dioxide	Maximum 20 ppm	ICUMSA GS 2/3-35 (2000) NMKL 135 (1990) EN 1988-2 (1998) ICUMSA GS 2/1/7-33(2005) Rosaniline Colorimetric Method

References

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The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BFAD AO 88-B s. 1984, Rules and Regulation Governing the Labelling of Prepackaged of Food Products Distributed in the Philippines

BFAD AO 153 s. 2004, Revised Guidelines on Current Good Manufacturing, Packing, Repacking or Holding Food

BFAD Bureau Circular 01-A s. 2004, Guidelines for the Assessment of Microbiological Quality of Processed Foods

Codex Stan 1-1985, Rev. 6-2008, Codex General Standard for the Labelling of Prepackaged Foods

Codex Stan 234-1999, Codex Standard for General Methods of Analysis and Sampling

CAC/GL 21-1997, Codex Principles for Establishment and Application of Microbiological Criteria for Foods

Codex Stan 212-1999, Amd. 1-2001, Codex Standard for Sugars

CAC/RCP 1-1969 Rev. 4-2003, Recommended International Code of Practice – General Principles of Food Hygiene recommended by the Codex Alimentarius Commission

International Commission for Uniform Methods of Sugar Analysis (ICUMSA) Methods Book 2005 and 2007

RA 7394 “The Consumer Act of the Philippines”

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