



DRAFT CARICOM REGIONAL STANDARD

BROWN SUGAR – SPECIFICATION

DCRS 62: 201X

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Foreword

This Draft CARICOM Regional Standard has been prepared by the Regional Project Team- Sugars through the CARICOM Regional Organisation for Standards and Quality (CROSQ) to provide a uniform level of acceptance quality for brown sugar manufactured and traded in the CARICOM Community. It is a revision of the Caribbean Community Standards, Specification for brown sugar.

In the preparation of this standard assistance was derived from:

- Caribbean Community Standard, Specification for brown sugar;
- Guyana Standard, GYS 17: 2004, Specification for brown sugar;
- East African Standard, EAS 749: 2010, Brown sugars- Specification.

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Brown sugar - Specification

1 Scope

This standard specifies the requirements for brown sugar intended for direct human consumption.

2 Normative references

ICUMSA Method GS 1/3-7, Determination of the Solution Colour of Raw Sugars, Brown Sugars and Coloured Syrups at pH 7.0 – Official

ICUMSA Method GS 2/1/3/9-15, The Determination of Sugar Moisture by Loss on Drying – Official

ICUMSA Method GS 1-10, The Determination of Ash in Raw Sugar by Single Sulphation – Official

ICUMSA Method GS 1/2/3-2 without lead, The Determination of the Polarisation of Raw Sugar without Wet Lead Clarification – Tentative

ICUMSA Method GS 1/2/3/9-1, The Determination of the Polarisation of Raw Sugar by Polarimetry – Official

ICUMSA Method GS 1-20, The Determination of Fine Grain in Raw Sugar by the BSES method – Tentative

ICUMSA Method GS 1/3/7-3, The Determination of Reducing Sugars in Cane Raw Sugar, Cane Processing Products and Specialty Sugars by the Lane and Eynon Constant Volume Procedure – Accepted

ICUMSA Method GS 1/2/9-15, The Determination of Dextran in Raw Sugar by a Modified Alcohol Haze Method - Official

3 Terms and Definitions

For the purpose of this standard, the following terms and definitions shall apply:

3.1 approved or official method:

The International Commission for Uniform Methods of Sugar Analysis (ICUMSA).

3.2 brown sugar:

Shall be partially refined product made from sugar cane.

3.3 bulk sugar:

Sugars which requires further processing before consumption.

3.4 invert sugar:

The mixture of sugar formed by the hydrolysis of a disaccharide (in this case sucrose) into fructose and glucose.

3.5 sugar:

Crystalline sucrose.

3.6 pol (apparent sucrose):

The value determined by direct or single polarization of the standard weight solution in a sacharimeter (polarimeter).

4 Specific requirements

4.1 When analysed in accordance with the latest version of the International Commission for Uniform Methods of Sugar Analysis (ICUMSA), the following specific requirements shall apply:

Table 1: Specific requirements for brown sugar

Specifics	Direct Consumption
Colour	< 3000
Polarisation	Above 98
Loss on drying	0.4
Safety factor	0.22
Insoluble solids	500ppm max.
Invert sugar (1%)- Raw sulphated ash	0.5
Dextran	250 ppm

5 Taste and odour

Brown sugar shall be free from objectionable and uncharacteristic taste and odour.

6 Contaminants**6.1 Pesticide residues**

Brown sugar shall conform to those maximum pesticide residue limits established by the Codex Alimentarius Commission.

7 Heavy metals

Brown sugar shall conform to those heavy metal contaminant limits established by the Codex Alimentarius Commission.

8 Microbiological requirements

8.1 Mesophilic bacteria shall not be more than 200/10g sugar.

8.2 Yeast shall be of maximum limit 20 cfu/10g.

8.3 Mould shall be of maximum limit 20 cfu/10g.

9 Sampling and analysis

The methods of sampling and analysis shall be specified in accordance with the latest versions of International Commission for Uniform Methods of Sugar Analysis (ICUMSA) seen in **Table 2**.

Table 2 showing recommended ICUMSA Methods for brown sugar

No.	Analysis	Reference Method
1	Colour	ICUMSA Method GS1/3-7
2	Moisture content by loss on drying	ICUMSA Method GS2/1/3/9-15
3	Ash	ICUMSA Method GS1-10, tentative
4	Polarization	ICUMSA Method GS1/2/3-2, Without Lead clarification ICUMSA Method GS1/2/3/9-1, With Lead clarification
5	Fine grain in Raw sugar (Grain size)	ICUMSA Method GS1-20, tentative
6	Reducing sugar	ICUMSA Method GS1/3/7-3
7	Dextran	ICUMSA Method GS1/2/9-15