

	ESPECIFICAÇÃO TÉCNICA DO PRODUTO – TRADUÇÕES (TECHNICAL PRODUCT SPECIFICATION)	ETPT N°: 001	Revision: 17	Page: 1 de 4
		Date of Issuance: 29/05/2018	Last Revision: 11/07/2025	
Product:	CRYSTAL SUGAR			

1. OBJECTIVE

Define the chemical, biological, and physical-chemical characteristics of the sugars produced by the Grupo Santa Isabel, to comply with IN 47/2018 - MAPA and IN 60/2019 - MAPA for sugars - Group II.

2. APPLICATION

Applies to the internal control of all Crystal Type White Crystal Sugar and VHP Type Raw Crystal Sugar produced by the Grupo Santa Isabel.

3. DESCRIPTION

3.1. Composition

Sugarcane sucrose – **99.7% min.**

Water – **0.07% max.**

AR (Fructose + Glucose) – **0.02% max.**

Insoluble Solids – **0.21% max.**

3.2. Definition

As defined in Resolução RDC nº 723 de 01/07/2022 – Requisitos sanitários do açúcar e Instrução Normativa nº 47, de 30 de agosto de 2018 – Regulamento Técnico do Açúcar.

Crystal Sugar Type I, II, III and IV: Sugar in crystalline form, with color controlled within the specified range, produced directly at the mill, without refining, originating from ready-to-eat sugar cane.

Class: White Crystal.

Type: Crystal.

Type V Raw Crystal Sugar - (VHP): Raw sugar, well-defined crystals, originating from sugar cane, requiring reprocessing for consumption.

Class: Rough Crystal.

Type: VHP.

3.3. Product Name (product name)

Type I White Crystal Sugar

- Storage in Big Bags from 1000 to 1300 kg.
- Sales on the domestic market and export in bags of 50 kg and 25 kg.

Type II White Crystal Sugar

- Storage in Big Bags from 1000 to 1300 kg.
- Sales on the domestic market and export in bags of 50 kg and 25 kg.

Type III White Crystal Sugar

- Storage in Big Bags from 1000 to 1300 kg.
- Sales on the domestic market and export in bags of 50 kg and 25 kg.

Type IV White Crystal Sugar

- Storage in Big Bags of 1000 to 1300 kg.
- Sales on the domestic market and export in bags of 50 kg and 25 kg.

Elaborated by:		Critically analyzed by:		Approved by:
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Type V Raw Sugar (VHP)

- VHP sugar maximum color 1200 U.I.
- Packed in bags weighing 1000 to 1250 kg.
- In bulk.

3.4. Chemical, Biological, and Physical-Chemical Characteristics, Storage, and Packaging

3.4.1. Organoleptic, Physical, Chemical, Biological and Macroscopic	Method	TYPE I	TYPE II	TYPE III	TYPE IV	TYPE V (VHP)	Frequency of analyzes
Appearance	POP LA (AÇ)-002	Related to type of Sugar				N/A	Daily composite sample of the batch.
Smell	POP LA (AÇ)-003						
Taste	POP LA (AÇ)-004						
ICUMSA Color (U.I.) IN 47/2018 - Mapa e IN 60/2019 – Mapa	POP LA (AÇ)-005	100 max.	150 max.	200 max.	240 max.	1200 max.	
Polarization (°Z) IN 47/2018 - Mapa e IN 60/2019 – Mapa	POP LA (AÇ)-006	99,70 min.	99,70 min.	99,50 min.	99,50 min.	99,00 min.	
Moisture (%) IN 47/2018 - Mapa e IN 60/2019 – Mapa	POP LA (AÇ)-007	0,07 max.	0,07 max.	0,07 max.	0,07 max.	0,15 max.	
Black Sptos (Nº/100 g) IN 47/2018 - Mapa e IN 60/2019 – Mapa	POP LA (AÇ)-008	7 max.	7 max.	10 max.	10 max.	-	
Insoluble Residue (Nº/100g)	POP LA (AÇ)-009	5 max.	5 max.	7 max.	7 max.	-	
Magnetized Particles (mg/kg) IN 47/2018 - Mapa e IN 60/2019 – Mapa	POP LA (AÇ)-010	≤ 3				-	
Conductometric Ash (%) IN 47/2018 - Mapa e IN 60/2019 – Mapa	POP LA (AÇ)-011	0,07 max.	0,07 max.	0,10 max.	0,10 max.	0,15 max.	
Sulphite (mg/kg) RDC 778/2023 - CNS e IN 211/2023 - Anvisa	POP LA (AÇ)-012	10,0 max.				-	Internal Lab: daily / External Lab: quarterly.
Starch (mg/kg)	POP LA (AÇ)-013	180 max.			-	-	Daily composite sample of the batch.
Dextran (mg/kg)	POP LA (AÇ)-014	150 max.			-	-	
Alcoholic flakes (abs)	POP LA (AÇ)-015	0,120 max.				-	
Granulometry (mm)	POP LA (AÇ)-016	0,5 - 0,8 AM-mm				0,7 - 1,0	
Foreign matter indicating a risk to human health							
Microscopic (particles/dirt) RDC 623/2022 - Anvisa - Anexo I Grupo 7	External laboratory	Absence of dirtiness that affects consumption				-	Quarterly of the composite sample of the batch.
Macroscopic (dirt, parasites, larvae, and inferior tissues) (mg/kg) RDC 623/2022 - Anvisa - Anexo I Grupo 7		1 max.					
Insoluble Ash in HCl (Sand) (%) RDC 623/2022 - Anvisa - Anexo I Grupo 7		1,5 max.					
Dead Mites (No./100g) RDC 623/2022 - Anvisa - Anexo II		5 max.					
Microbiological Standards							
Total coliforms (NMP/g) ⁽²⁾	POP LA (MB)-003 / External laboratory	10 ² max.				-	Internal Lab: weekly. External Lab: Unit I: Monthly Salmonella and other analyses quarterly. Unit II: per production period.
Salmonella sp.	POP LA (MB)-002/ External laboratory	Absent in 25 grams.				-	
Molds and yeasts (UFC/g) RDC 724/2022 - Anvisa e IN 161/2022 - Anvisa (Anexo I Cat. 16)	POP LA (MB)-005/ External laboratory	< 10				-	
Contaminants							
Arsenic (mg/kg) RDC 722/2022 - Anvisa e IN 160/2022 - Anvisa (Anexo I Item 1.1)	External laboratory	0,10 max.				-	Quarterly of the composite sample of the batch.
Copper (mg/kg) RDC 722/2022 - Anvisa e IN 160/2022 - Anvisa (Anexo I Item 1.4)		10,0 max.				-	
Lead (mg/kg) RDC 722/2022 - Anvisa e IN 160/2022 - Anvisa (Anexo I Item 1.3)		0,10 max.				-	
Mycotoxins (mcg/kg) ⁽³⁾ RDC 722/2022 - Anvisa e IN 160/2022 - Anvisa (Anexo II)	External laboratory	There is no product control limit				-	Annually.
Dioxins and Furans (PCDD+PCDF) (pg/g) ⁽³⁾ RDC 722/2022 - Anvisa e IN 160/2022 - Anvisa (Anexo III)	External laboratory Method AOAC CR-0109	There is no product control limit				-	Biennially.

⁽¹⁾ The parameter is established based on RDC No. 12, from January 2, 2001. The determination of *Escherichia coli* is performed through the analysis of Total Coliforms. In Unit I, this analysis is conducted in an internal laboratory, including confirmatory tests for Total Coliforms and Thermotolerant Coliforms. In Unit II, the analysis of Total Coliforms is conducted in an internal laboratory, and Thermotolerant Coliforms are analyzed in an external laboratory.

⁽³⁾ According to Normative Instruction No. 160, dated July 1, 2022, the limits defined in Annex II - Maximum Tolerated Limits for mycotoxins in food for Aflatoxin M1, Aflatoxins (B1 + B2 + G1 + G2), Deoxynivalenol (DON), Fumonisin (B1 + B2), Ochratoxin A, Patulin, Zearalenone (ZEA), Benzo(a)pyrene, Dioxins (PCDD), furans (PCDF), and polychlorinated biphenyls (PCB) do not apply to the product. An additional analysis is conducted annually.

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3.5. Storage Requirements

Keep in dry places, away from chemical products and sunlight, below 40°C and moisture at 30 - 90%.
Shelf life - 24 months.

3.6. Packing / Distribution

Primary: 50 kg and 25 kg bags – low density polyethylene (liner), secondary - polypropylene (raffia).
Primary: 1000 - 1300 kg big bags - polypropylene (raffia).
Distribution: Covered trucks.

3.7. Nutritional Information in 5 g and 100 g portions. ⁽³⁾

NUTRITIONAL INFORMATION			
Amount per serving	100 g	5 g	% DV (*)
Energy value (kcal)	400	20	1
Carbohydrates (g)	100	5	2
Total sugars (g)	100	5	
Added sugars (g)	0	0	0
Proteins (g)	0	0	0
Total Fat (g)	0	0	0
Saturated fat (g)	0	0	0
Trans fats (g)	0	0	0
Dietary fibers (g)	0	0	0
Sodium (mg)	0	0	0

(RDC N° 429 Anvisa de 08/10/2020 / IN N° 75 Anvisa de 08/10/2020)

⁽³⁾ Analyses carried out biennially on the composite sample of the batch.

"Does not contain significant amounts of added sugars, proteins, saturated fats, trans fats, dietary fiber and sodium."

() Daily reference values based on a diet of 2000 kcal or 8400 kJ. Your daily values may be higher or lower depending on your energy needs. Gluten-free*

3.8. Additional Information

GMO: Product not from genetically modified organisms.

Inputs of animal origin: Not used in any stage of the manufacturing process.

Target audience: supermarkets, wholesalers and candy factories in the domestic market.

Allergenic compounds: When the sulfite residual is greater than 10 mg/kg.

Rigid, pointed and/or sharp objects, equal to or greater than 2 mm (measured in the largest dimension) – Absence.

Sensitive populations: diabetics.

Preparation and intended use: in portions diluted in liquids or added in the preparation of recipes.

Cross-Contamination: There are control measures to prevent microbiological, chemical, physical and allergen cross-contamination.

Shelf life after opening: 6 months.

Packaging labeling meets the specific legislation for the product.

GLUTEN-FREE.

3.9. Additional information

Pesticides ⁽⁴⁾: The product meets the residual limits of pesticides determined by the Codex Alimentarius (GS 0659) of sugarcane.

Aw = 0.40 - 0.60.

pH = 6.0 - 7.3 (aqueous solution 100 g/l).

⁽⁴⁾ Analyses carried out for each harvest, of the sample composed of the batches shipped.

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3.10. Item lists

ITEM	DESCRIÇÃO
81	AÇÚCAR CRISTAL BRANCO 50 KG - MI - SC REVESTIDO
82	AÇÚCAR CRISTAL BRANCO 25 KG - MI - SC REVESTIDO
34	AÇÚCAR CRISTAL BRANCO - BIG BAG
40	AÇÚCAR CRISTAL CLASSE BRUTO VHP - BIG BAG 1300 KG
30	AÇÚCAR CRISTAL CLASSE BRUTO VHP A GRANEL – EXPORTACAO
31	AÇÚCAR CRISTAL BRANCO 50 KG - EXPORTAÇÃO SC MARROM
32	AÇÚCAR CRISTAL BRANCO 25 KG - EXPORTAÇÃO SC MARROM
39	AÇÚCAR CRISTAL CLASSE BRUTO VHP 50 KG - EXPORTAÇÃO
53	AÇÚCAR CRISTAL BRANCO - BIG BAG 1000 KG - EXPORTAÇÃO
71	AÇÚCAR CRISTAL BRANCO 50 KG - EXPORTAÇÃO SC BRANCA
72	AÇÚCAR CRISTAL BRANCO 25 KG - EXPORTAÇÃO SC BRANCA
74	AÇÚCAR CRISTAL CLASSE BRUTO VHP - EXPORTAÇÃO BIG BAG 1000 KG
79	AÇÚCAR CRISTAL CLASSE BRUTO VHP - EXPORTAÇÃO BIG BAG 1075 KG
86	AÇÚCAR CRISTAL CLASSE BRUTO VHP - EXPORTAÇÃO BIG BAG 1200 KG
128	AÇÚCAR CRISTAL RECLASSIFICADO (VARREDURA)
129	AÇÚCAR CRISTAL BRANCO FORA DE PADRÃO (VARIAÇÃO DE COR 200 ATÉ 300)

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