	ESPECIFICAÇÃO TÉCNICA DO PRODUTO – TRADUÇÕES (TECHNICAL PRODUCT SPECIFICATION)	ETPT Nº:	Revision:	Page:
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Product:	CRYSTAL SUGAR			

1. OBJECTIVE

Define the chemical and physical-chemical characteristics of the sugars produced by Usina Santa Isabel S/A.

2. APPLICATION

Apply to the internal control of all White Crystal Sugar and VHP produced by Usina Santa Isabel S/A.

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.

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 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;
- Packed in bags weighing 1000 to 1250 kg;
- In bulk.

3.4. CHEMICAL AND PHYSICAL - CHEMICAL CHARACTERISTICS, STORAGE AND PACKING

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	Analysis performed daily, of the composite sample of the batch.
Smell	POP LA (AÇ)-003							
Taste	POP LA (AÇ)-004							
ICUMSA Color (U.I.) (IN Nº 47 Mapa de 30/08/2018)	POP LA (AÇ)-005	100 max.	150 max.	200 max.	240 max.	1200 max.		
Polarization (°Z) (IN Nº 47 Mapa de 30/08/2018)	POP LA (AÇ)-006	99,70 min.	99,70 min.	99,50 min.	99,50 min.	99,00 min.		
Moisture (%) (IN Nº 47 Mapa de 30/08/2018)	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 Nº 47 Mapa de 30/08/2018)	POP LA (AÇ)-008	7 max.	7 max.	10 max.	10 max.	-		
Insoluble Residue (Nº/100 g) (IN Nº 47 Mapa de 30/08/2018)	POP LA (AÇ)-009	5 max.	5 max.	7 max.	7 max.	-		
Magnetized Particles (mg/kg) (IN Nº 47 Mapa de 30/08/2018)	POP LA (AÇ)-010	≤ 3				-		
Conductometric Ash (%) (IN Nº 47 Mapa de 30/08/2018)	POP LA (AÇ)-011	0,07 max.	0,07 max.	0,10 max.	0,10 max.	0,15 max.		
Sulphite (mg/kg) (IN Nº 211, de 1º de março de 2023)	POP LA (AÇ)-012	10,0 max.				-	Internal laboratory: daily. / External laboratory: quarterly.	
Starch (mg/kg)	POP LA (AÇ)-013	180 max.			-	-	Analysis performed daily, of the composite sample of the batch.	
Dextran (mg/kg)	POP LA (AÇ)-014	150 max.			-	-		
Alcoholic flake (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								
Microscopic (particles/dirt)	External laboratory	Absence of dirtiness that affects consumption					-	Analyzes carried out for each harvest, of the sample composed of the batches shipped
Macroscopic (dirt, parasites, larvae, and inferior tissues)		1 g in 500 g max.					-	
Insoluble Ash in HCl (Sand) (%) (RDC Nº 623 Anvisa de 09/03/2022 Anexo I Grupo 7)		1,5 max.					-	
Microbiological Standards								
Coliforms at 45°C (RDC Nº 724 Anvisa de 01/07/2022 (Complemento IN Nº 161) / IN Nº 161 Anvisa de 01/07/2022 – Anexo I Categoria 16)	POP MB-003/ External laboratory	10 UFC/g max.					-	Analysis performed once a week, of samples collected during the week.
Salmonella (RDC Nº 724 Anvisa de 01/07/2022 (Complemento IN Nº 161) / IN Nº 161 Anvisa de 01/07/2022 – Anexo I Categoria 16)	POP MB-002/ External laboratory	Absent in 25 grams.					-	
Molds and yeasts (RDC Nº 724 Anvisa de 01/07/2022 (Complemento IN Nº 161) / IN Nº 161 Anvisa de 01/07/2022 – Anexo I Categoria 16)	POP MB-005/ External laboratory	10 UFC/g max.					-	
Contaminants								
Arsenic (mg/kg) (RDC Nº 722 Anvisa de 01/07/2022 (Complemento IN Nº 160) / IN Nº 160 Anvisa de 01/07/2022 – Anexo I – Item 1.1)	External laboratory	0,10 max.					-	Analyzes carried out for each harvest, of the sample composed of the batches shipped.
Copper (mg/kg) (RDC Nº 722 Anvisa de 01/07/2022 (Complemento IN Nº 160) / IN Nº 160 Anvisa de 01/07/2022 – Anexo I – Item 1.4)		10,0 max.					-	
Lead (mg/kg) (RDC Nº 722 Anvisa de 01/07/2022 (Complemento IN Nº 160) / IN Nº 160 Anvisa de 01/07/2022 – Anexo I – Item 1.3)		0,10 max.					-	
Mycotoxins (mcg/kg) ⁽¹⁾ (RDC Nº 722 Anvisa de 01/07/2022 (Complemento IN Nº 160) / IN Nº 160 Anvisa de 01/07/2022 – Anexo II)	External laboratory	There is no product control limit					-	Annually.
Dioxins and Furans (PCDD+PCDF) (pg/g) ⁽¹⁾ (RDC Nº 722 Anvisa de 01/07/2022 (Complemento IN Nº 160) / IN Nº 160 Anvisa de 01/07/2022 – Anexo III)	External laboratory Method AOAC CR-0109	There is no product control limit					-	Biennially.

⁽¹⁾ 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 sun light, 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 portion. ⁽²⁾

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

“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*

(RDC Nº 429 Anvisa de 08/10/2020 / IN Nº 75 Anvisa de 08/10/2020)

⁽²⁾ Analyzes carried out for each harvest, of the sample composed of the batches shipped.

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 and allergens.

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 and physical cross-contamination.

Shelf life after opening: 6 months.

Packaging labeling meets the specific legislation for the product.

GLUTEN-FREE.

3.9. Additional information

Pesticides ⁽³⁾: The product meets the residuallimits 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).

⁽³⁾ Analyzes carried out for each harvest, of the sample composed of the batches shipped.

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Product:

CRYSTAL SUGAR

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

Cópia não controlada

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