

White granulated sugar – product specifications

Name	White granulated sugar																																																																									
Product description	<p>White granulated sugar is a product of crystallic texture containing mainly sucrose at the minimal quantity of 99.7 %, and belonging to a group of natural sweeteners.</p> <p>Colour: white; taste: sweet.</p> <p>Water solution of sugar is clear or only slightly opalescent. White granulated sugar is a loose and uniform granularity mixture.</p>																																																																									
Basic input materials	Sugarbeet, water																																																																									
Basic characteristics of the technological process	<p>Sugar-sucrose is industrially separated from the basic raw material, sugarbeet, in the following technological processes:</p> <ol style="list-style-type: none"> 1. Cleaning and chopping the sugarbeet 2. Extracting “raw juice” 3. Purifying and filtering the juice 4. Evaporating and preparing “mother liquor” 5. Crystallisation 6. Centrifuging 7. Drying and stabilising. 																																																																									
Sensory requirements	<p>Colour–Appearance: white, alt. with minor colour imbueement, no stains, specks or foreign impurities;</p> <p>Taste – Odour: sweet and odourless, without any foreign taste or odour;</p> <p>Texture: crystallic, not tacky on touch, without lumps;</p> <p>Appearance of the solution: clear or only slightly opalescent;</p>																																																																									
Physical and chemical limiting values stipulated in Regulation No.76/2003 Coll. for natural sweeteners	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Sucrose (polarograph)</td> <td style="width: 10%; text-align: right;">minimum</td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: right;">99.7 %</td> <td colspan="4"></td> </tr> <tr> <td>Drying loss</td> <td style="text-align: right;">maximum</td> <td></td> <td style="text-align: right;">0.06 %</td> <td colspan="4">by weight</td> </tr> <tr> <td>Colour in solution at 420 nm</td> <td style="text-align: right;">maximum</td> <td></td> <td style="text-align: right;">45 IU</td> <td colspan="4"></td> </tr> <tr> <td>Invert sugar</td> <td style="text-align: right;">maximum</td> <td></td> <td style="text-align: right;">0.04 %</td> <td colspan="4">by weight</td> </tr> <tr> <td>Insoluble matter content</td> <td style="text-align: right;">maximum</td> <td></td> <td style="text-align: right;">50 mg / kg</td> <td colspan="4"></td> </tr> </table> <p>Points system evaluation of white sugar:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Maximum points total for evaluation</td> <td style="text-align: right;">22</td> </tr> <tr> <td>From that: Ash matter- max. points</td> <td style="text-align: right;">15</td> </tr> <tr> <td style="padding-left: 20px;">Colour in solution – max. points</td> <td style="text-align: right;">6</td> </tr> <tr> <td style="padding-left: 20px;">Type line – maximum of points</td> <td style="text-align: right;">9</td> </tr> </table> <p>Sorting by the size of grains - the fractions rates in % by weight:</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 10%;">Sieve</th> <th style="width: 10%;">2,00 mm</th> <th style="width: 10%;">1,00 mm</th> <th style="width: 10%;">0,80 mm</th> <th style="width: 10%;">0,63 mm</th> <th style="width: 10%;">0,4 mm</th> <th style="width: 10%;">0,315 mm</th> <th style="width: 10%;">0,160 mm</th> <th style="width: 10%;">sifting</th> </tr> </thead> <tbody> <tr> <td>Regul.</td> <td></td> <td colspan="4" style="background-color: #cccccc;">Minimum 70%</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>								Sucrose (polarograph)	minimum		99.7 %					Drying loss	maximum		0.06 %	by weight				Colour in solution at 420 nm	maximum		45 IU					Invert sugar	maximum		0.04 %	by weight				Insoluble matter content	maximum		50 mg / kg					Maximum points total for evaluation	22	From that: Ash matter- max. points	15	Colour in solution – max. points	6	Type line – maximum of points	9	Sieve	2,00 mm	1,00 mm	0,80 mm	0,63 mm	0,4 mm	0,315 mm	0,160 mm	sifting	Regul.		Minimum 70%						
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Microbiological requirements	EU Commission Regulation EU 2073/2005 on Food microbiological criteria as amended, Chapter 1. Food safety criteria: Under normal conditions, the regular examination stipulated in the related criterion is not useful with food specified for direct consumption of sugar.
Chemical requirement for limiting the health threats of food.	Gov. Regulation No. 305/2004 Coll., as amended, stipulating contaminants and toxicologically relevant substances, does not impose any permissible limits specifically for sugar. Similarly in EC regulations: EU1881/2006 imposing maximum limits of some contaminants for foodstuffs. Gov. Regulation No. 4/2008 Coll., as amended, listing the allowed additives and auxiliary admixtures and the conditions for their use in the foodstuffs' production, sets the maximum amount limit of sulphur dioxide: 10 mg per 1kg of sugar.
Packaging (including specifications of the applied wrapping materials)	<ol style="list-style-type: none"> 1. 0.5kg, 1kg, and 2kg packaging (bags of Kraft-paper) packed in bunches with a plastic foil wrapping –total weight : 10kg; 2. 15kg and 25kg packaging – paper valve bags; 3. 50kg packaging – paper valve bags; polypropylene valve bags with a polyethylene lining; 4. 400kg – 1000kg Big-bags made of grey polypropylene fabric; 5. In bulk - dry-bulk tankers for food transportation;
Distribution of the product	The allowed means of transport must comply with the hygiene requirements on food transportation as stipulated in the Act No.110/97 Coll., as amended, – valid for packed foodstuffs. The allowed means of transport must comply with the hygiene requirements on food transportation as stipulated in the Act No.110/97 Coll. as amended, and the requirements of the Gov. Regulation 38/2001 Coll., as amended, - on materials in contact with foodstuffs: applicable for foodstuff bulk carriers.
Storage conditions	Storage conditions in compliance with Gov. Regulation 76/2003Coll., as amended, - for natural sweeteners. Sugar should be kept at the maximum ambient temperature 30° C, and maximum relative air humidity 70 %.
Minimum durability	Durability is not limited for the stipulated storing conditions.
Allergens	There are no allergic substances in the product. It contains only traces of SO ₂ , - well below the 10mg/kg limit.
GMO	The product is not made of genetically modified raw materials.
Wrapping material	PAP – the material complies with the Parliament and EU Council Resolution 1935/2004