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ISOMALT ST (all solid types)

Description

- Isomalt is a mixture of hydrogenated saccharides. Main components are 6-O-α-D-glucopyranosyl-D-sorbitol (1,6-GPS) and 1-O-α-D-glucopyranosyl-D-mannitol (1,1-GPM).
- ISOMALT ST is a crystalline isomalt.

Specifications

Physical and Chemical Parameters

Parameter	Limit	Unit	Method
Water ¹	max. 5.0	g/100 g	Karl Fischer titration
GPM + GPS ^{1,2}	min. 98	g/100 g d.m.	DIN EN 15086: 2006
of which GPS ¹	43 - 57	%	DIN EN 15086: 2006
D-mannitol ^{1,2}	max. 0.5	g/100 g d.m.	DIN EN 15086: 2006
D-sorbitol ^{1,2}	max. 0.5	g/100 g d.m.	DIN EN 15086: 2006
Reducing sugars (as glucose) ¹	max. 0.2	g/100 g d.m.	ICUMSA GS2/9-6, adapted
Conductivity ¹	max. 20	µScm ⁻¹	ICUMSA GS2/3/9-17, adapted
Ash	max. 0.02	g/100 g d.m.	calculated from conductivity
Arsenic ¹	max. 0.2	mg/kg d.m.	ICUMSA GS2/3-23
Nickel ¹	max. 1	mg/kg d.m.	Ph. Eur. 2.4.15
Lead ¹	max. 0.2	mg/kg d.m.	ICUMSA GS2/3-24
Total heavy metals (as lead) ¹	max. 10	mg/kg d.m.	FCC

on Confirmation of Conformity



sum ≥ 98 % corresponding to not less than 98 % total hydrogenated mono- and disaccharides

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Microbiological Parameters

Parameter	Limit	Unit	Method ¹
Total mesophilic bacteria (aerobes)	max. 100	cfu/g	ICUMSA GS2/3-41
Yeasts	max. 10	cfu/g	ICUMSA GS2/3-47
Moulds	max. 10	cfu/g	ICUMSA GS2/3-47
Coliforms (incl. E. coli)	negative	/25g	DIN 10183, adapted

or acknowledged and validated equivalent

Particle size distribution¹

Product	Particle size for at least 90 % by weight	Method
ISOMALT ST-M	0.5 mm – 3.5 mm	ICUMSA GS2/9-37
ISOMALT ST-PNC	0.8 mm – 1.25 mm	ICUMSA GS2/9-37
ISOMALT ST-F	0.2 mm – 0.71 mm	ICUMSA GS2/9-37
ISOMALT ST-C	< 0.4 mm	ICUMSA GS2/9-37
ISOMALT ST-FE	0.063 mm – 0.3 mm	Air jet sieving
ISOMALT ST-PF	< 0.1 mm	Air jet sieving
ISOMALT ST-PA	< 0.05 mm	Air jet sieving

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Additional Information

Information relevant for Nutrition Declaration

Nutritional information provided in the table shall enable food manufacturers to calculate the contribution of ISOMALT in their food products in compliance with applicable EU/US food legislation. More detailed information is available upon request.

Nutrient	Typical Value ¹	Unit per 100 g
Energy value (EU) ²	970/233	kJ/kcal
Calories (US) ³	805/194	kJ/kcal
Fat	Negligible ⁴	g
Carbohydrates	97	g
sugars	Negligible ⁴	g
polyols	97	g
Fibre	Negligible ⁴	g
Protein	Negligible ⁴	g
Salt (sodium)	Negligible ⁴	g
Vitamins, Minerals ⁵	Negligible ⁴	g

Proposed values are typical values.

⁵ ISOMALT is not a typical source of vitamins/minerals.



Applying the energy conversion factor of 10 kJ/2.4 kcal/g laid down for polyols in EU food legislation.

Applying the science-based energy conversion factor of 8.3 kJ/2.0 kcal/g isomalt as accepted by the US and other countries' authorities.

Negligible means "0" for macronutrients according to applicable rounding rules in EU and US.

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Other information

Appearance White or almost white, crystalline

Colour in solution Max. 30 ICUMSA Units

Taste Sweet

Odour Odourless (product-specific)

Identification test

Solubility

Soluble in water

Ash (sulphated) Not more than 0.05 g/100 g

Regulatory Information available upon request

HS code 2940 00

(Customs tariff number)

RecommendedTemperature 20 °C ± 5 °C,
storage conditions
Relative humidity 20 % - 60 %

Minimum durability 3 years from production date under recommended storage conditions

in its original unopened packaging

Compliance andKosher (certificate available upon request)CertificationHalal (certificate available upon request)

Suitable for vegetarians & vegans

ISOMALT ST is not produced from ingredients or using processing aids that would require allergen labelling as laid down in Regulation

Thin layer chromatography, high performance liquid chromatography

(EU) No 1169/2011.

ISOMALT ST is not derived from genetically modified organisms

(GMO).

Product is produced in Germany in compliance with applicable German and European Food Law (e.g. Regulation (EC) No 178/2002,

Regulation (EC) No 852/2004) as well as international quality

standards including ISO 9001 and IFS Food. The specifications cover the requirements for isomalt of Codex Alimentarius, Food Chemicals

Codex (FCC) and Regulation (EU) No 231/2012.

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QMD 03.057	007	01-08-2015

Disclaimer

To the best of our knowledge, the information in this sheet is reliable.

