

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

¹ on Confirmation of Conformity

² sum \geq 98 % corresponding to not less than 98 % total hydrogenated mono- and disaccharides

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

¹ or acknowledged and validated equivalent

Particle size distribution¹

Product	Particle size for at least 90 % by weight	Method
ISOMALT ST-M	0.5 mm – 3.55 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 – 0.315 mm	Air jet sieving
ISOMALT ST-PF	< 0.1 mm	Air jet sieving
ISOMALT ST-PA	< 0.05 mm	Air jet sieving

¹ on Confirmation of Conformity

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 (EU) ²	970/233	kJ/kcal
Calories (US) ³	194	kcal
Fat ⁵	Negligible ⁴	g
Carbohydrate ⁵	97	g
Sugars ⁵	Negligible ⁴	g
Polyols (sugar alcohol)	97	g
Fibre	Negligible ⁴	g
Protein	Negligible ⁴	g
Salt (sodium)	Negligible ⁴	g
Vitamins, Minerals	Negligible ⁴	g

¹ Proposed values are typical values.

² Applying the energy conversion factor of 10 kJ/2.4 kcal/g laid down for all polyols in EU food legislation.

³ Applying the energy conversion factor of 2.0 kcal/g as laid down for isomalt in US food labelling legislation.

⁴ Negligible means "0" according to applicable rounding rules in EU and US.

⁵ "Fat", "carbohydrate" and "sugars" are "total fat", "total carbohydrate" and "total sugars", respectively; ISOMALT does not contain added sugars.

Other information

Appearance	White or almost white, crystalline
Colour in solution	Max. 30 ICUMSA Units
Taste	Sweet
Odour	Odourless (product-specific)
Identification test	Thin layer chromatography, high performance liquid chromatography
Solubility	Soluble in water
Ash (sulphated)	Not more than 0.05 g/100 g
Regulatory	Information available upon request
HS code (Customs tariff number)	2940 00
Recommended storage conditions	Temperature 20 °C ± 5 °C, Relative humidity 20 % - 60 %
Minimum durability	3 years from production date under recommended storage conditions in its original unopened packaging
Compliance and Certification	<p>Kosher (certificate available upon request) Halal (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 (EU) No 1169/2011. In accordance with the applicable German Law, ISOMALT ST is not derived from genetically modified organisms (GMO).</p> <p>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.</p>

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Disclaimer

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