



1. Product Identification

Product Name:	Maltose syrup
Commercial Name:	High Maltose Syrup 52
Barcode:	8606105499309
Appearance:	Colorless to bright yellow liquid, low viscosity, neutral scent and moderately sweet taste.
Chemical composition:	High Maltose syrup 52 is a product obtained by enzymatic digestion of corn starch and represents the mixture of maltose, dextrose and higher saccharides.

2. Characteristics

NAME / unit	Value	Limits	Analysis Method
Dry Substance (%)	min 80	-	MI.53 – SRPS EN ISO 1743 - Refractometry
DE value	49	-	MI.52 – SRPS EN ISO 5377
pH (40% suspension)	-	4.0 - 5.0	MI.55 – Potenciometry
SO ₂ (mg/kg)	max 10	-	MI.54 – Acidimetry
Sulphur ash on DS content (%)	max 0.3	-	MI.57 – SRPS EN ISO 5809
Typical carbohydrate composition:			
Maltose on DS content (%)	52	-	IC
Glucose on DS content (%)	9	-	IC
Heavy metals content			
Lead (mg/kg)	-	max 2	ICP/MS – BS EN 15763
Arsenic (mg/kg)	-	max 1	ICP/MS – BS EN 15763
Copper (mg/kg)	-	max 2	ICP/MS – VM/MET 865
Microbiological criteria			
Yeasts and Molds (CFU/g)	-	max 100	ISO/FDIS 21527-2
Enterobacteriaceae (CFU/g)	-	max 10	SRPS ISO 21528-1
Number of aerobic colony (CFU/g)	-	max 1000	SRPS EN ISO 4833
Salmonella spp (/25g)	absent	-	SRPS EN ISO 6579

3. Legal Acts

The product is in accordance with these regulations:

- 3.1 Regulation of the quality of starch and starch products for food industry
Official Gazette of the SRJ no. 33/95; Official Gazette of the SCG no. 56/03, 4/04
- 3.2 Regulation on food additives
Official Gazette of the RS no. 63/13
- 3.3 Law on Food Safety
Official Gazette of the RS no. 41/09
- 3.4 Regulation on general and special conditions of hygiene of food at any stage of production, processing and trade
Official Gazette of the RS no. 72/10
- 3.5 Regulations on food hygiene requirements
Official Gazette of the RS no. 73/10
- 3.6 Regulation on the maximum allowable residues of pesticides in food and animal feed and of food and animal feed which is determined by the maximum allowable amounts of residues of plant protection
Official Gazette of the RS no. 29/14, 37/14, 39/14, 72/14
- 3.7 Regulations on the general declaration and marking of packed foodstuffs
Official Gazette of the RS no. 85/13

	Made by:	Approved:
Name	Sanja Stefanov	Ljubica Nedeljковиć
Signature		
Starch Industry "JABUKA" Pančevo	PRODUCT SPECIFICATION HIGH MALTOSE SYRUP 52	No: <u>SP.19/1</u> Issue No.04/Date: November 2014.



3.8 Law on Genetically Modified Organisms

Official Gazette of the RS 41/2009

3.9 Law on safety of Foods and objects for general use Official Gazette of the RS no. 92/2011

3.10 Regulations on limits of radionuclide content in drinking water, foodstuffs, feeding stuffs, medicines, general use products, construction materials and other goods placed on the market, Official Gazette of the RS 86/11, 97/13

4. Packaging

PET packaging (25 - 280 kg); Storage reservoirs – tanks.

5. Marking / labeling

Regulations on the general declaration and marking of packed foodstuffs, Official Gazette of the RS no. 85/13

6. Storage conditions/Transport

Storage: Under normal environmental conditions; closed reservoirs made out of the material regulated for the usage in food industry; with a valve and the possibility of heating on the temperature of 55 °C. Original PET package in closed rooms.

Note: Prolonged storage and higher temperatures may lead to color change, darkening of the syrup

Transport: The transport is carried out in bulk truck made of food contact grade materials. Links, pipes and pumps must be food contact grade, they must be cleaned before every loading/unloading of the truck.

7. Validity

6 months

8. Application

The advantage of maltose syrup usage in food industry is based on its basic physical and chemical properties:

- low hygroscopic properties,
- low viscosity,
- moderate sweetness, mild taste,
- high resistance to colour change in the presence of protein and amino acids,
- saccharine and glucose crystallisation inhibitor, without the tendency to own crystallisation,
- higher effect of microbiological protection compared to sucrose,
- lower freezing point,
- high fermentation.

These properties represent an improvement compared to the characteristics of standard starch syrups. Maltose syrup 52 can be used in the production of hard candy, jams, jellies and other soft sweets, ice cream and other frozen desert, and in beer production.

9. Information for Special Needs Customer Group

Allergenic constituent	Used as ingredient		Potential cross contamination	
	Yes/No	Nature of the constituent	Yes	No
Peanuts and products thereof	No			No
Crustaceans and products thereof	No			No
Fish and products thereof	No			No
Eggs and products thereof	No			No
Nuts and products thereof	No			No
Milk and products thereof (including lactose)	No			No
Soybeans and products thereof	No			No
Cereals containing gluten and products thereof (*)	No			No
Sulphur dioxide and products thereof	No			No
Celery and products thereof	No			No
Sesame seeds and products thereof	No			No
Mustard and products thereof	No			No
Mollusks and products thereof	No			No
Lupin and products thereof	No			No

(*) Refer to wheat, rye, barley, rice, oats, kamut or their hybridised strains

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