

SPECIFICATIONS

*Fructose*NP[®]

Crystalline Fructose

Naturally Sweet, Naturally Energizing

- A Non GMO, food grade Crystalline Fructose, derived from sugar.
 - It is the natural choice for producers of high quality pharmaceuticals.
 - Tested and approved for Injectable Solutions
- Fructose[®] NP conforms to the EP, BP and USP requirements for Crystalline Fructose



General Characteristics

Formula:	C ₆ H ₁₂ O ₆
Molecular weight:	180
Appearance:	White crystals
Taste:	Sweet
Odor:	Odorless
Solubility (g /100 ml at 25°c):	Very soluble in water, soluble in ethanol. Sparingly soluble in ether.

Analysis

Identification	Value	Method
Bacterial Endotoxins	< 0.5	Lal – limulus 10% fructose solution
Fructose (%)	> 99.5	HPLC, on d.s.
Dextrose (%)	< 0.1	Enzymatic –Glucose Oxidase
pH	5.0-7.0	pH-meter 10% sol.
Moisture (%)	< 0.2	Karl Fischer
Specific rotation	(-91.0) - (-93.5)	Polarimeter
Ash (%)	< 0.01	ICUMSA conductivity
Calcium (ppm)	<5	Metal scan by ICP
Iron (ppm)	<5	Metal scan by ICP
Sulphate (ppm)	<50	Ion Chromatograph scan
Chloride (ppm)	<40	Ion Chromatograph scan
HMF (absorbance)	< 0.32	Spectrophotometer, EP method
Color of solution (Icumsa)	<20	ICUMSA
SO ₂ (ppm)	<10	Spectrophotometer
Bulk density (gr./lit)	800-900	Free flowing volume

SPECIFICATIONS**Microbiology**

Analysis	Unit	Value	Method
Total count	n/g	<100	Israeli Std. 885 for Microbiological testing  
Yeasts	n/g	<10	
Moulds	n/g	<10	
Coliforms	n/g	negative	
E. Coli	n/g	<10	
Staphylococcus aureus (Coa+)	n/g	<50	
Salmonella	n/50 g	negative	
Sulfite reducing clostridium	n/g	<10	
Enterobacteraceae	n/g	<10	
Aerobic mesophilic sporeforming bacteria	n/g	<10	
Aerobic thermophilic sporeforming bacteria	n/g	<10	
Anaerobic mesophilic spores count	n/g	<10	
Bacillus cereus	n/g	<50	FDA 14
Listeria monocytogenes	n/25 g	negative	USDA/FDA

Heavy Metals

Identification	Value	Method
Total (ppm)	< 1.0	Metal scan by ICP
Arsenic (ppm)	< 0.5	Metal scan by ICP
Lead (ppm)	< 0.1	Metal scan by ICP
Cadmium (ppm)	< 0.1	Metal scan by ICP
Mercury (ppm)	< 0.03	Cold Vapor

Pesticides

Identification	Value	Method
Pesticide Residues	< 10 ppb	GC-MS

SPECIFICATIONS**Mycotoxins**

Total Aflatoxins	< 4 ppb
Aflatoxin G1	< 2 ppb
Aflatoxin B1	< 1 ppb
Aflatoxin G2	< 2 ppb
Aflatoxin B2	< 1 ppb
Ochratoxin A	< 10 ppb

GMO

Fruitose[®] is Non-GMO and according to EC regulation No. 1829/2003/EC and 1830/2003/EC, the product has a non-labeling status.

Allergens

Fruitose[®] is Allergen free according to (EC) No. 2000/13 Annex IIIa and ALBA list.

Fruitose[®] does not contain food additives, food colors, antioxidants, preservatives or material of animal origin.

Fruitose[®] Nutritional Information (for 100 g)

Energy	398 Kcal; 1663 KJ
Protein	0 g
Total Carbohydrate	99.8 g
Dextrose	<0.1 g
Fructose	>99.8 g
Fat	0 g
Ash	< 0.1 g
Sodium	0 g
Fiber	0 g

Storage

Fruitose[®] is acceptably stable to air and heat, but it is hygroscopic. Keep package closed. Sealed bags should be stored in-doors under cool, dry conditions, preferably below 25°C and at a relative humidity less than 60%.

Shelf life

24 months stored sealed under recommended conditions.

Packaging

Packing information will be submitted upon request.

Galam's plant is certified ISO 9001:2000, ISO 14001, OHSAS 18001, HACCP (NSF), BRC-Food (ISA) and GMP.

Fruitose[®] is Kosher and Halal certified.

	Name	Signature
QA Manager	Orly Lavi	
QC Technologist	Gila Amit	



The information presented here is true and accurate to the best of our knowledge, but without any guarantee. Since conditions of use are beyond our control, we disclaim any liability, including for patent infringement incurred in connection with the use of these product data or suggestions.

Galam Group
Refining Nature's Raw Materials
www.galamgroup.com