

# FructoSan<sup>®</sup>

Crystalline Fructose



Pure  
Sweetness



THE PRODUCT DOES NOT CONTAIN GENETICALLY MODIFIED ORGANISMS

**NON  
GMO**



Specifications >>

# Crystalline Fructose

## Natural Healthy Sweetener



FructoSan® is a natural Non-GMO sweetener well appreciated for its various features and benefits



### Benefits

- Healthy living
- Low glycemic index (GI)
- Slow release energy
- Synergy with intense non caloric sweeteners
- Non-insulin dependent
- Low water activity
- Less cariogenic
- Improving texture, appearance and mouthfeel
- Suitable for low-calorie products
- Reducing cost

### Features

- High sweetness
- Enhancing flavor
- Non-GMO sweetener
- High solubility in water
- Excellent humectancy
- High freezing point depression
- Low viscosity level
- Enabling easy browning
- Shelf - stability



The sweetener of choice that will add healthy and natural sweetness to your creations!

### In Beverages

FructoSan® provides an intense natural flavor and enhances sweetness. Using a small dose of FructoSan® gives a great amount of sweetness.

### In Yoghurt & Desserts

FructoSan® enhances flavor, creaminess, aroma and fruitness intensively while reducing calories. It helps increasing stability and shelf life of finished products.

### In Jams & Fruit Preparations

FructoSan® enhances the flavor, aroma, texture and appearance. It improves the fruitness and stability of fruit jams and marmalades. FructoSan® is ideal for home - made jams, jellies and fruit preparations. FructoSan® helps increasing sweetness without compromising on taste or calories





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### In Sport Drinks

FructoSan® provides energy boost with slow release of energy with a balanced blood glucose level. It masks the taste of artificial sweeteners making the product more delicious.

### In Ice - Cream & Sorbet

FructoSan® allows to produce low-calorie products. It also provides high freezing point depression in ice-cream and sorbet. It makes them softer, sweeter and spoonable.

### In Baked Goods

FructoSan® is an excellent humectant. It provides longer humectancy, consistency and freshness. It has a lower water activity which makes baked goods resistant to microbial and chemical degradation. FructoSan® provides excellent browning when necessary.

### FructoSan® Saves Calories

FructoSan® is on average 1.3 times sweeter than sugar depending on pH and temperatures. Less fructose is required to achieve same sweetness, enabling also calorie savings.

### FructoSan® Prevents Dental Caries

Fructose is the least cariogenic among all natural sweeteners. It's suitable for baby food.

### FructoSan® Is Ideal For Glycemic Index (GI) Control In Diabetics

Foods with a low GI have significant health benefits for diabetics and health conscious people. Fructose has low GI and is insulin-independent.

### FructoSan® Helps Mineral Absorption

Fructose enhances mineral absorption. This is a great benefit for people such as pregnant women who require increased levels of minerals, especially iron and calcium.





# FructoSan® Specification

- ☑ A Non GMO, food grade crystalline fructose, which is processed from high fructose corn syrup.
- ☑ The sweetener of choice which enhances natural and healthy sweetness in foods and beverages.
- ☑ FructoSan® is a pure white free-flowing nutritive sweetener.
- ☑ FructoSan® conforms to the EP, USP, FCC and Codex Alimentarius requirements for Crystalline Fructose.

## General Characteristics

Formula	C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>
Molecular weight	180
Appearance	White crystals
Taste	Sweet
Odor	Odorless
Solubility lg / 100ml at 25oC)	Very soluble in water, soluble in ethanol. Sparingly soluble in ether.

## Granulation

Product	Code No	Microns	Limits
FructosanM®	FS1		
FructosanC®	FS2	On 200 On 600	min. 80% max. 25%
FructosanN®	FS3	On 600 On 1250	min. 90% max. 20%
FructosanMF®	FS4	On 250	min. 40%
FructosanMC®	FS7	On 200 On 600	min. 95% max. 1%

## Analysis

Identification	Value	Method
Fructose (%) II	> 99.5	HPLC, on d.s.
pH	5.0-7.0	pH-meter, 10% solution
Moisture (%)	< 0.2	Karl Fischer
Specific rotation	[-91.0] - [-93.5]	Polarimeter
Sulphated Ash (%)	< 0.1	FCC
HMF (ppm)	< 40	Spectrophotometer
Color of solution (Icumsa)	< 20	ICUMSA
Acidity (mL)	< 0.5	Titration with 0.02N NaOH
SO <sub>2</sub> (ppm)	< 10	Spectrophotometer
Bulk density (gr/lit)	800-1000	Free flowing volume
Calcium (ppm)	< 5	External lab.*
Sulphate (ppm)	< 50	External lab.*
Chloride (ppm)	< 40	External lab.*

## Microbiology

Analysis	Unit	Value	Method
Total count	n/g	<100	Filtration Method
Yeasts	n/g	<10	Filtration Method
Moulds	n/g	<10	Filtration Method
Coliforms	n/g	negative	External Lab.
E. Coli	n/g	negative	External Lab.
Staphylococcus aureus	n/g	negative	External Lab.
Salmonella	n/50g	negative	External Lab.
Sulfite reducing clostridium	n/g	<10	External Lab.
Enterobacteraceae	n/g	<10	External Lab.
Aerobic mesophilic sporeforming bacteria	n/g	<10	External Lab.
Aerobic thermophilic sporeforming bacteria	n/g	<10	External Lab.
Anaerobic mesophilic spores count	n/g	<10	External Lab.
Bacillus cereus	n/g	<10	External Lab.
Listeria monocytogenes	n/25g	negative	External Lab.





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## Heavy Metals

Analysis	Unit	Value	Method
Iron	ppm	< 1.0	External lab.*
Copper	ppm	< 1.0	External lab.*
Arsenic	ppm	< 0.1	External lab.*
Lead	ppm	< 0.1	External lab.*
Cadmium	ppm	< 0.1	External lab.*
Mercury	ppm	< 0.03	External lab.*

## Mycotoxins

Analysis	Unit	Value	Method
Total Aflatoxin	ppb	< 4	External lab.*
Aflatoxin G1	ppb	< 2	External lab.*
Aflatoxin B1	ppb	< 1	External lab.*
Aflatoxin G2	ppb	< 2	External lab.*
Aflatoxin B2	ppb	< 1	External lab.*
Ochratoxin A	ppb	< 3	External lab.*

## Pesticides

Analysis	Unit	Value	Method
Pesticide Residues	ppb	≤ 10	External lab.*

## Fructosan® Nutritional Information (for 100g)

Energy	398Kcal; 1663KJ
Protein	0g
Total Carbohydrate	100g
Dextrose	<0.1g
Fructose	>99.9g
Fat	0g
Ash	<0.1g
Sodium	0g
Fiber	0g

## GMO

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

## Storage

FructoSan® 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. Optimum storage and handling conditions for FructoSan® are 25°C or lower and less than 60% relative humidity.

## Shelf Life

24 months stored sealed under recommended conditions.

## Allergens

FructoSan® is Allergen free according to EC regulations: 2000/13/EC annex IIIa, 2003/89/EC, 2006/142/EC and ALBA list.

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

## Packaging

FructoSan® crystalline fructose is packed in 25kg bags or big bags.

## Certificates

Omnia Nişasta's plant is certified ISO 9001:2000, ISO 14001, OHSAS 18001, ISO 22000, ISO 27001, BRC, IFS FSSC 22000 and IP for NON GMO  
FructoSan® is Kosher and Halal certified.



# FructoSan®

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