



Ingredion™

SORBOGEM® 712 Crystalline Sorbitol NF/FCC 261054

SORBOGEM® 712 Crystalline Sorbitol 261054 is one of the most widely used polyols in the food, confectionery, pharmaceutical and industrial markets. Typical functionality is as a cryoprotectant, crystallization inhibitor, freeze point depressant, plasticizer, humectant and excipient.

technical specification

Chemical and Physical Properties

(NF/FCC)	Min.	Max.
Water, %	-	1.5
Assay, % d.b. D-Sorbitol	91.0	100.5
Reducing Sugars*, mL	12.8	-
Identification A		Conforms
Identification B		Conforms
Residue on ignition, % d.b.	-	0.1
Lead, ppm	-	1
Nickel, ppm	-	1
pH, (10% w/w in water)	3.5	7.0

*Based on a sample wt. of 3.3 g NLT 12.8mL of 0.05 N sodium thiosulfate, (NMT 0.3% as glucose)

Properties

Properties	Typical
Relative Sweetness (vs. sucrose)	60%
Hygroscopicity	High
Caloric Value	2.6 kcal/g, d.b.
Solubility @25°C	235 g/100 mL water
Heat of Solution	-26.5 kcal/g
Melting Point Range	99-101°C
Molecular Weight	182 g/mol

Screen Test

Screen Test	Typical
% on U.S.S. #30 mesh (590 micron)	< 0.5
% on U.S.S. #40 mesh (420 micron)	< 5
% thru U.S.S. #200 mesh (74 micron)	< 35

Sensory Data

Odor	No detectable foreign odor
Flavor	Clean sweet taste

Microbiological Standards

Microbiological Standards	Max.
Total Aerobic Microbial Count, cfu/g	1000
Total Combined Yeast and Mold, cfu/g	100

Nutritional Data/100g

Nutritional Data/100g	Typical
Calories	259
Total Fat, g	<0.1*
Sodium, mg	<1*
Total Carbohydrate, g	99.7
Dietary Fiber, g	0
Total Sugars, g	<0.1*
Added Sugars, g	0
Sugar Alcohols, g	99.7
Protein, g	<0.1*
Vitamin D, mcg	0
Calcium mg	<1*
Iron, mg	<0.1*
Potassium, mg	<5*
Ash, %	<0.1*

*Not present at level of quantification

Certification

Kosher Pareve

Packaging and Storage

Bulk bags
Drums

Recommended storage temperature is 50°F-100°F (10°C-38°C). Storage at elevated temperature may result in caking of the sorbitol which would affect ease of handling.

Shelf Life

Shelf life is 2 years. Retest every 24 months for water, reducing sugars and assay.

Regulatory Data

CAS No. 50-70-4

United States

Meets NF (National Formulary) and FCC (Food Chemical Codex) requirements.

GRAS Affirmation 21 CFR 184.1835
Labeling Sorbitol

Canada

Food Additive
Labeling Sorbitol

Features and Benefits

White crystalline powder
Free flowing
Humectant
Cryoprotectant and freezing point depressant
Sugar Free bulking
Non-browning
Non-cariogenic
60% as sweet as sucrose
Pleasant cooling effect

Effective Date: August 22, 2023

Next Review August 22, 2026

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