D-Glucuronic acid FOOD GRADE { technical data sheet



1 Overview

Product Name: D-Glucuronic Acid Synonyms: Glucuronic acid; D-(+)-Glucuronic acid.

Description

D-Glucuronic acid is a sugar acid derived from glucose, and is important for many biological processes.

Product Form: White crystalline powder Molecular Weight: 194.14 g/mol Molecular Formula: $C_6H_{10}O_7$ CAS Number: 6556-12-3

Origin

The product has a natural origin, obtained from a non-GMO proprietary bacterial exopolymer.

Typical Applications

This product is suitable for use in food-grade applications.

Chemical Structure



2 Product Specifications

Test	Specification
Purity	≥ 95%
Appearance	Off-white powder
Residue on ignition	< 2 wt%
Loss on drying	< 3 wt%
Total Heavy Metals	< 5 ppm
Lead	< 0.5 ppm
Melting Point	159º to 161º C
¹ H-NMR	Structure Confirmation
Specific Rotation	+35° to +37°

CP detection limits: Pb: 100 ppb.

Total Heavy Metals (THM) is calculated by the sum of the average results of the following elements: Ag, As, Bi, Cd, Cu, Hg, Mo, Pb, Sb and Sn.

3 Microbial Limits

Test	Specification
Total Aerobic Microbial Count	< 1.000 CFU/g
Total Yeast and Mold Count	<100 CFU/g
Salmonella Species	Negative
Escherichia coli	Negative
Staphylococcus aureus	Negative
Pseudomonas aeruginosa	Negative
Listeria Monocytogenes	< 100 CFU/g
Enterobacteriaceae	< 100 CFU/g

CFU - Colony-forming unit



4 Safety Information

Storage Instructions

Keep container tightly closed. Keep container in a cool, well-ventilated area. Store at room temperature.

Handling

Keep away from heat. Keep away from sources of ignition. Rinse abundantly the empty containers with water prior to discard. Ground all equipment containing material. Do not breathe dust.

Wherever possible, prepare and use solutions on the same day. Stock solutions may be prepared in advance, if stored as aliquots in tightly sealed vials at -20°C, up to one month. Before use, it is recommended that the product reach room temperature prior to opening the vial.

5 Regulatory Information

Compendial Compliance

Not applicable, all test methods are based on USP/Ph Eur methodology for Galactose, a related product.

BSE/TSE and viral risk statement

The product is resulting from non-animal sources. Therefore, this product complied with the requirements stipulated in EMEA 410/01 as negligible risk for BSE/TSE.

Allergen Information

The D-Glucuronic acid production does not use any known food allergens reagents (as defined by the FDA and WHO).

GMO information

D-Glucuronic is not derived from a GMO.

Residual solvents information

The product is produced without use of Class 1 or 2 organic solvents according to USP<467> and CPMP/ICH/283/95.

Melamine Statement

The material is not assayed by a test that detects nitrogen. This product is considered negligible risk for melamine contamination.

These are provisional specifications obtained from experimental batches. Definitive product specifications will be established with the product supplied from validated industrial batches.

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