

GLUCOSAMINE

A natural amino sugar, extracted from crustaceans.
On-hand white, crystalline, and odourless powder.
Applicable as food additive and for medicine device products.



BY NOW, GLUCOSAMINE HCl, GLUCOSAMINE SULFATE KCl, AND
GLUCOSAMINE SULFATE NaCl ARE AVAILABLE, INCLUDING

DRUG MASTER FILES (in CTD-format)

SPECIFICATIONS

Product	Glucosamine HCl	Glucosamine KCl	Glucosamine NaCl
Product no.	5210002900	5210001900	5210005900
Formula	C ₆ H ₁₃ NO ₅ HCl	(C ₆ H ₁₄ NO ₅) ₂ SO ₄ 2KCl	(C ₆ H ₁₄ NO ₅) ₂ SO ₄ 2(NaCl)
Molecular weight	215.63	605.52	573.31
Controls	Specification	Specification	Specification
Description	white, crystalline powder	white, crystalline powder	white powder
Identification	A: IR Spectrum B: Chlorides C: by HPLC	A: IR Spectrum B: Chlorides, Potassium, Sulfate C: by HPLC	A: IR Absorbtion B: Chlorides, Sodium, Sulfate C: by HPLC
Solubility	Freely soluble in water	Freely soluble in water	Freely soluble in water
Specific rotation (25mg/ml solution in water)	+70° – +73°	+50° – +52°	+52° – +54°
pH (20mg/ml solution in water)	3.0 – 5.0	3.0 – 5.0	3.0 – 5.0
Loss on drying (at 105°C for 2 hours)	≤ 1.0 %	≤ 1.0 %	≤ 1.0 %
Residue on ignition	≤ 0.10 %	27.0 – 29.0 %	23.5 – 25.0%
Sodium	not tested	should be absent	7.5 – 8.5 %
Arsenic	≤ 3 µg/g	≤ 3 µg/g	≤ 3 µg/g
Heavy metals	≤ 10 ppm	≤ 10 ppm	≤ 10 ppm
Residual solvents	≤ 1000 ppm	≤ 1000 ppm	≤ 1000 ppm
Sontent of Sulfate	≤ 0.24 %	15.5 – 16.5 %	16.3 – 17.3 %
Assay by HPLC (on dried basis)	98.0 – 102.0 %	98.0 – 102.0 %	98.0 – 102.0 %
DL Threonine content by HPLC	≤ 0.50 %	≤ 0.50 %	≤ 0.50 %
Chloride	not tested	11.0 – 12.5 %	12.0 – 13.0 %
Potassium	not tested	12.0 – 13.5 %	7.5 – 8.5 %
Related substances by HPLC			
a. Chitosan	≤ 0.10 %	≤ 0.10 %	≤ 0.10 %
b. 5-HMF	≤ 0.10 %	≤ 0.10 %	≤ 0.10 %
c. Any unknown impurities	≤ 0.10 %	≤ 0.10 %	≤ 0.10 %
d. total impurities	≤ 0.50 %	≤ 0.50 %	≤ 0.50 %
Microbiological analysis			
a. total microbial count	≤ 1000 CFU/g	≤ 1000 CFU/g	≤ 1000 CFU/g
b. E-coli & Salmonella	should be absent in 10 g	should be absent in 10 g	should be absent in 10 g
c. Yeast & Molds	≤ 100 CFU/g	≤ 100 CFU/g	≤ 100 CFU/g

The substances are tested according to USP and in-house methods.
For further information, please contact us directly.