

Certificate of Analysis

Product Name	Glucosamine Hydrochloride	Batch No.	DN-PTTA20210505
Manufacturing Date	2021-05-05	Expiration Date	2024-05-04

Item	Specification	Result	Method
Assay	98.0~102.0%	99.09%	HPLC
Physical & Chemical Data			
Appearance	White Crystalline Free Flowing Powder	Conforms	Organoleptic
Odor & Taste	Characteristic	Conforms	
Analytical Quality			
Identification		Identical	TLC
Sieve	NLT 90% Through 80 mesh	Conforms	Mesh Screen
Loss on Drying	≤0.5%	0.04%	CP2020
Ash	≤0.1%	0.07%	CP2020
Bulk Density	0.30~0.70g/ml	Conforms	CP2020
Tapped Density	Conforms	Conforms	CP2020
Specific Rotation (α) D ²⁰	+70.00°-- +73.00°	+72.30°	CP2020
pH (20mg/ml.aq.sol.)	3.0~5.0	4.18	CP2020
Chloride (Cl)	16.2% -- 16.7%	16.30%	CP2020
Sulfate	≤ 0.24%	Conforms	
Iron (fe)	≤10 ppm	Conforms	
Organic volatile impurities	Conforms	Conforms	Conforms
Pesticide Residue			
Total Heavy Metals	≤10ppm	Conforms	Colorimetry
Arsenic(As)	≤3ppm	Conforms	AAS
Lead(Pb)	≤0.5ppm	Conforms	AAS
Mercury(Hg)	≤0.5ppm	Conforms	AAS
Microbiological Tests			
Total Plate Count	≤10000cfu/g	Conforms	CP2020
Yeast & Mold	≤300cfu/g	Conforms	CP2020
E.Coli	Negative	Negative	CP2020
Salmonella	Negative	Negative	CP2020
Staphylococcus	Negative	Negative	CP2020
Enterobacteria & other gram neg	≤100 cfu/g	Negative	CP2020
Conclusion	Conform with specification		

Storage

Cool & dry place.Do not freeze.Keep away from strong light and heat.

Shelf Life 24 months under the conditions above and in its original packaging.

Package In double sealed PP bags, 10/25kgs Drum.

Tested by: Mr Chen Date: 2021-07-21