

# Specification of D- Glucosamine Sulfate Potassium Chloride

Product: D- Glucosamine Sulfate Potassium Chloride

Type: Food Grade

Package:25KG Drum

ITEM	SPECIFICATION	TEST METHOD	RESULTS
<b>Properties (physical):</b>			
Appearance	White Crystalline, Free Flowing Powder	USP39 -- <695>	Complies
Odour	Odourless	Complies	Complies
Bulk Density	NLT0.85g/mL	USP39 -- <616>	0.90g/mL
As Tapped Density	Meets the requirements of USP39	USP39 -- <616>	Complies
Particle Size	NLT 98% through 30 Mesh	USP39 -- <811>	Complies
<b>Analytical Properties:</b>			
Assay (HPLC)	98.0%~102.0% (on the dried basis)	USP39 -- <621>	99.38%
<b>Identification</b>			
A: Infrared Absorption	Meets the requirement	A: USP39 -- <197K>	Complies
B: Tests for Chloride,Potassium,and Sulfate	Meets the requirement	B: USP39 -- <191>	Complies
C: Retention time in the Assay	Corresponds to the reference standard	C: USP39 -- <621>	Complies
Transm	>90.0% (10.0%Water Solut.-450nm)	USP39 -- <197>	97.2%
Specific Rotation (α) <sub>D</sub> <sup>20</sup>	+47.0°~+53.0°	USP39 -- <781S>	+51.35°
pH (20mg/mL aq. sol.)	3.0~5.0	USP39 -- <791>	4.35
Loss on Drying	NMT1.0%	USP39 -- <731>	0.02%
Residue on Ignition	26.5%~31.0%	USP39 -- <281>	28.48%
Chloride (Cl)	11.3% ~12.3%	USP39 -- <221>	11.61%
Content of Sulfate	15.5%~16.5%	USP39	15.71%
Potassium	11.7%~13.0%	GB/T 5009.91	12.30%
Sodium	Not impart a pronounced yellow color to a nonluminous flame	USP39	Complies
Heavy Metals	NMT 10 ppm	USP39 -- <231> II	Complies
Iron (fe)	NMT 10 ppm	USP39 -- <241>	Complies
Lead	NMT 0.5 ppm	USP39 -- <251>	0.10ppm
Arsenic (As)	NMT 1.0 ppm	USP39 -- <211> II	Complies
Mercury	NMT 0.1 ppm	USP39 -- <261>	0.06ppm
Cd	NMT 0.5ppm	GB/T 5009.15	0.05ppm
Organic volatile impurities	Meets the Requirements	USP39 -- <467> I	Complies
Residual Solvents (Ethanol)	NMT 0.5%	USP39	Complies
<b>Microbial:</b>			
Total Aerobic	NMT 1,000 cfu/g	USP39 -- <61>	NMT 10 cfu/g
Yeast & Mold	NMT 100 cfu/g	USP39 -- <61>	NMT 10 cfu/g
E. Coli	Negative in 1g	USP39 -- <62>	Negative
Salmonella	Negative in 1g	USP39 -- <62>	Negative
Staphylococcus Aureus	Negative in 10g	USP39 -- <62>	Negative
Enterobacteria & other gram neg	NMT 100 cfu/g	USP39 -- <62>	NMT 30cfu/g

Shelf Life: 24 months

Store in tight, light-resistant containers