

# SHANDONG YIBAOBIOLOGICS CO., LTD

## GLUCOSAMINE SULFATE 2KCL

### SPECIFICATION

ITEM	SPECIFICATION
<b>Properties (physical):</b>	
Appearance	White Crystalline, Free Flowing Powder
Odour	Odourless
Bulk Density	NLT0.85g/ml
As Tapped Density	Meets the requirements of USP32
Particle Size	100% through 80 Mesh
<b>Analytical Properties:</b>	
Assay (HPLC)	98.0—102.0% (on the dried basis)
<b>Identification</b>	
A: Infrared Absorption	Meets the requirement
B: Tests for Chloride, Potassium, and Sulfate	Meets the requirement
C: Retention time in the Assay	Corresponds to the reference standard
Specific Rotation ( $\alpha$ ) <sub>D</sub> <sup>20</sup>	+50.00°-- +52.00°
PH (20mg/ml.aq.sol.)	3.0—5.0
Loss on Drying	NMT1.0%
Residue on Ignition	27.0%--29.0%
Chloride (Cl)	11.7% --12.3%
Content of Sulfate	15.5%--16.5%
Potassium	11.7%--13.0%
Sodium	No Precipitate is Formed
Heavy Metals	NMT 10 ppm
Iron (fe)	NMT 10 ppm
Lead	NMT 0.5 ppm
Arsenic (As)	NMT 0.5 ppm
Mercury	NMT 0.5 ppm
Organic volatile impurities	Meets the Requirements
Residual solvents	Meets the Requirements
<b>Microbial:</b>	
Total Aerobic	NMT 1,000 cfu/g
Yeast and Mold	NMT 100 cfu/g
E. Coli	Negative in 1g
Salmonella	Negative in 1g
Staphylococcus Aureus	Negative in 10g
Enterobacteria & other gram neg	NMT 100 cfu/g