



XI'AN GREEN SPRING TECHNOLOGY CO., LTD.

Tel:86 29 88326183 Fax:86 29 88328052

CERTIFICATE OF ANALYSIS

Product Name: D-Panthenol
Description: Clear ,viscous,somewhat hygroscopic liquid.
Some crystallization may occur on standing
Batch No.: 230305
Batch quantity: 1000kgs
Manufacturing date: Mar 05, 2023
Expiry Date: Mar 04,2025
Analysis Date: May 08, 2023
Standard: USP

Item	Specification	Results
Assay By HPLC (on the anhydrous basis)	98.0%-102.0%	99.73%
Identification		
A:Infrared absorption < 197F>	Conform to USP2021	Complies
B: The Sample solution	a deep blue color develops	Complies
C:The Sample solution	a purplish red color develops	Complies
Solubility	Freely soluble in water ,in alcohol , in methanol ,and in propylene glycol ; soluble in chloroform and in ether; slightly soluble in glycerin; practically insoluble in heptane.	Complies
Water determination	≤1.00%	0.13%
Residue on ignition	≤0.10%	0.04%
Specific optical rotation	+29.0° ~+31.5°	30.7°
Limit of aminopropanol	≤1.00%	0.88%
Refractive Index (20°C)	1.495~1.502	1.498

Storage Cool & dry place, Do not freeze. **Keep away from strong light and heat.**
Shelf 2 year when properly stored.

