

**ACROSS BIOTECH**

MAKE A DIFFERENCE

Certificate of Analysis

Product name	D-Panthenol	CAS No.:	81-13-0
Package:	20kg/drum	Quantity:	3,000kg
MFG Date:	2024/09/13	EXP Date:	2026/09/12
Batch No.:	DP24091301	Standard	USP40

Items	Standards	Results
Appearance	A colorless or slightly yellowish, viscous hygroscopic liquid (may crystallized on storage)	Conform
Identification	A. Infrared absorption (197F)	Conform
	B. The Sample solution: a deep blue color develops.	Conform
	C. The Sample solution : a purplish red color develops.	Conform
Specific optical rotation	+29.0° ~+31.5°	+31.5°
Limit of aminopropanol	≤1.0%	<0.5%
Water determination	≤1.0%	0.13%
Residue on ignition	≤0.1%	0.1%
Assay(on the anhydrous basis)	98.0%-102.0%	98.5%
Refractive Index (20°C)	1.495~1.502	1.498
Heavy metals	≤20 ppm	<10 ppm
Conclusion:	Conform to USP40.	