

Certificate of Analysis

Product Name: D-panthenol

INCI Name: D-panthenol, pantolactoneBatch Number: Check product package

Expiration Date: October 2027

Analytical Tests	Specifications	Results
Appearance	Clear thick liquid	Clear thick liquid
(Visual)		
Color	Colorless - slightly yellow	Colorless
(Visual)		
Identity (HPLC & Rotation)	Corresponds	Corresponds
(Visual)		
Specific Rotation (589nm, 20°C, c=5)	+29.5 to +32.0°	30.4°
(Polarimetry)		
Assay, D-Panthenol	≥75%	77.3%
(Titration)		
Sulfated ash	≤0.1%	Corresponds
(Gravimetric Analysis)		
Heavy Metals Colorimetric	≤10 ppm	Corresponds
(Visual)		
Free Amines as Aminopropanol	≤1.0%	0.8%
(Titration)		
Residual Solvents - Dichloromethane	≤50 ppm	Corresponds
(Gas Chromatography)		
Residual Solvents - Methanol	≤500 ppm	Corresponds
(Gas Chromatography)		
Total Aerobic Microbial Count	≤100 CFU/mL	<1 CFU/mL MAX

The above data were obtained using the test indicated and is subject to the deviation inherent in the test method. Results may vary under other test methods or conditions. This report is not to be signed. All data are as per our supplier.



Disclaimer: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitableness & completeness of such information for his own particular use.



Total Combined Yeasts/Molds	≤100 CFU/mL	<1 CFU/mL MAX
Escherichia coli	Negative in 1mL	Negative in 1mL
(Ph. Eur. 2.6.13)		
Staphylococcus aureus	Negative in 1mL	Negative in 1mL
(Ph. Eur. 2.6.13)		
Pseudomonas aeruginosa	Negative in 1mL	Negative in 1mL
(Ph. Eur. 2.6.13)		
Candida albicans	Negative in 1mL	Negative in 1mL
(Ph. Eur. 2.6.13)		

[&]quot;Certified in compliance with the terms of the US-Canada Organic Equivalency Arrangement. The above data was obtained using the test indicated and is subject to the deviation inherent in the test method. Results may vary under other test methods or conditions.

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