

Certificate of Analysis

(Representative Sample Certificate)

Product Name: Provitamin B5
INCI Name: D-Panthenol
CAS Number: 9041-22-9
Lot Number: Not available (data may vary slightly with different lots or batches)
Expiration Date: 24 months from production date

Analytical Tests	Specifications	Results
Appearance	Clear liquid	Clear liquid
Color	Colorless - slightly yellow	Colorless/slightly yellow
Identity (HPLC & rotation)	Confirmed by (HPLC & rotation)	corresponds
Specific Rotation (589nm, 20° C, c=5 Water)	+29.0 - +32.0 deg	30.7 deg
D-Panthenol Content (non-aqueous titration)	Min. 75%	76.1%
Sulphated ash	0 - 0.1 %	Corresponds
Heavy Metals (colorimetric comparison to Pb standard)	0 - 10 ppm	Corresponds
Free Amines as Aminopropanol (non-aqueous titration)	0 - 1 %	0.6%

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.

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