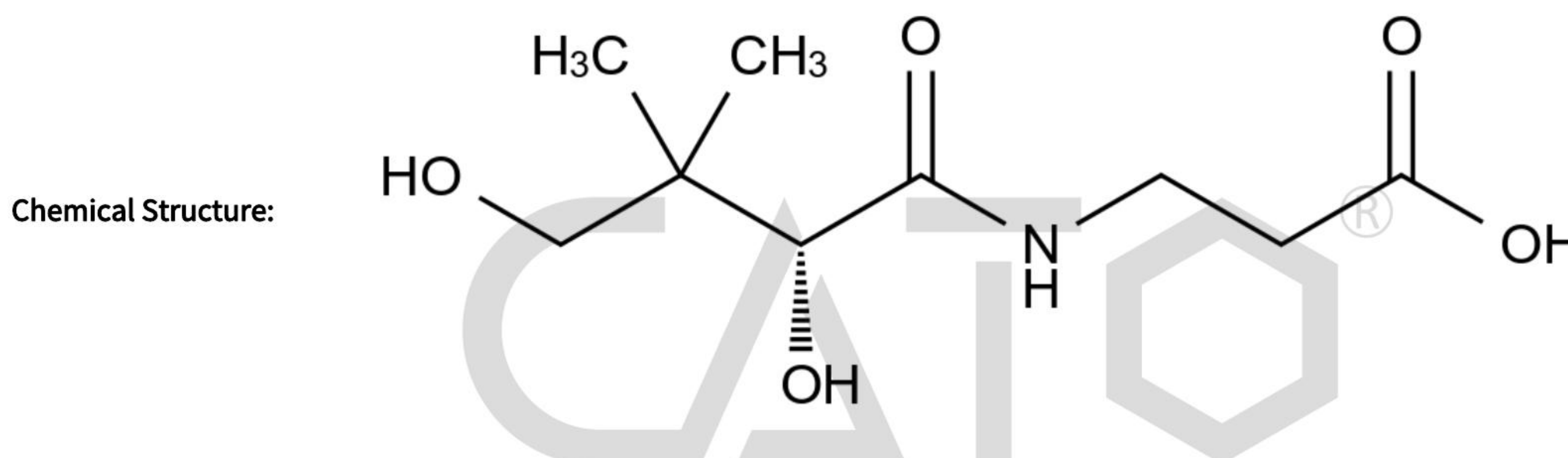


Certificate of Analysis

Reference Material & Standard

Product Name:	D-Pantothenic Acid	Catalogue Number:	CCAD300759
Synonyms:	N/A	Lot Number:	0918-RG-0035
CAS Number:	79-83-4	Expiry Date:	May 10, 2029
Molecular Formula:	C ₉ H ₁₇ NO ₅	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	219.23	Shipping Condition:	Shipping with Ice Packs



Test Items	Method	Results
Appearance	Visual inspection	White to Off-White Solid
Identification	HNMR	Confirmed
Purity	HPLC	98.968%
Loss on Drying	TGA	8.9517%
Assay		90.1%
Uncertainty		±1.0%

Comment:

1. The calculation of the mass balance method follows the formula (calculated on the non-dried basis):

$$\text{Assay (\%)} = (100\% - \text{Loss on Drying}) * \text{Purity HPLC (\%)} / 100\%$$

Loss on Drying is considered as absolute effect, HPLC purity is considered as relative effect.

2. The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Signature:

Prepared by:

Nice

Reviewed by:

Lisa

Approved by General Manager:

David

Date: May 11, 2026

Date: May 12, 2026

Date: May 12, 2026



Add: 3rd Floor, Building B, No.179, Guangpu Rd East, Huangpu District, Guangzhou, China

Tel: +86-20-81960175

Email: supports@cato-chem.com

Web: <https://www.cato-chem.com>

