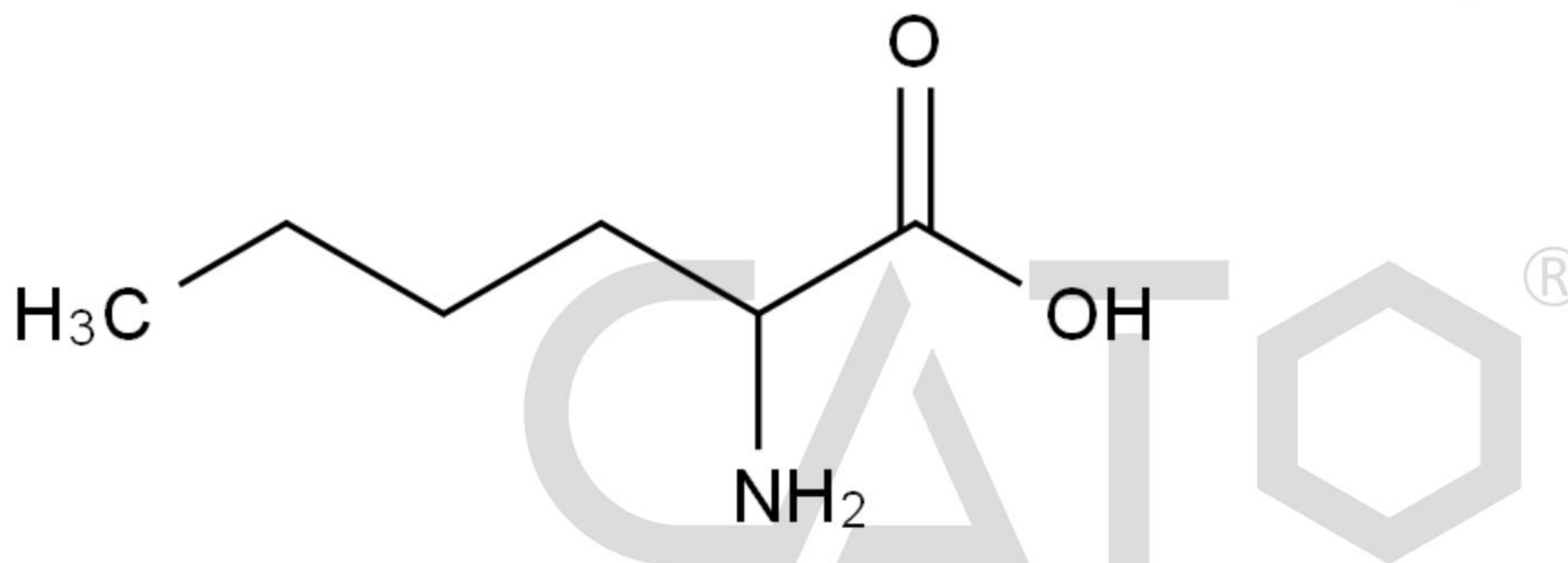


Certificate of Analysis

Reference Material & Standard

Product Name:	DL-Norleucine	Catalogue Number:	CCFD200621
Synonyms:	N/A	Lot Number:	0722-RC-0004
CAS Number:	616-06-8	Expiry Date:	Aug 04, 2025
Molecular Formula:	C ₆ H ₁₃ NO ₂	Storage:	Room Temp Protected from light and Sealed
Molecular Weight:	131.17	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Powder
Identification	LCMS&HNMR	Confirmed
Purity	T	99.5%
Water Content	Karl Fischer	0.5013%
Assay		99.0%
Uncertainty		±2.0%

Comment:

- Purity was determined by titration.
- The calculation of the 100% method follows the formula (calculated on the non-dried basis):

$$\text{Assay (\%)} = (100\% - \text{Water Content}) * \text{Purity T (\%)} / 100\%$$

Water Content is considered as absolute effect, T purity is considered as relative effect.
- 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:

Xenia

Reviewed by:

Cady

Aporoved by General Manager:

David



Date: Aug 05, 2021

Date: Aug 06, 2021

Date: Aug 06, 2021

