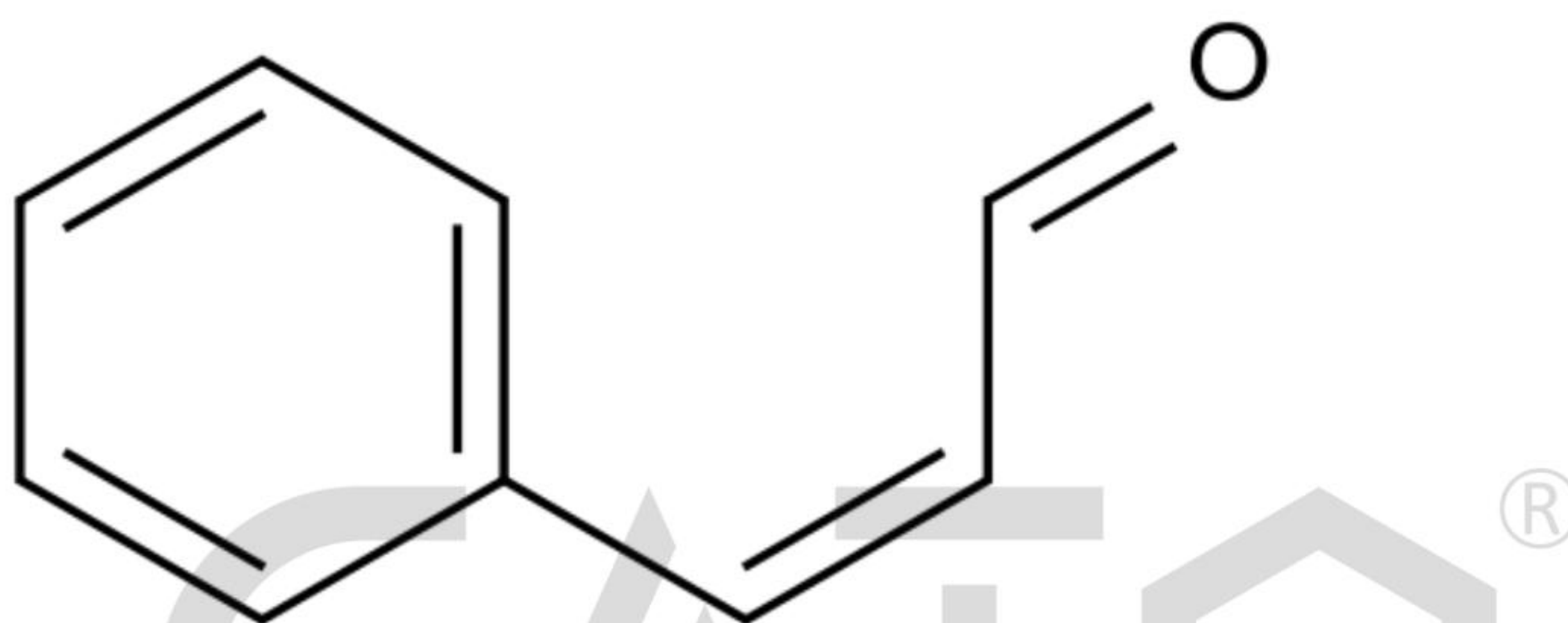


Certificate of Analysis

Reference Material

Product Name:	cis-Cinnamaldehyde	Catalogue Number:	CCAD303545
Chemical Name:	N/A	Lot Number:	0921-RD-0027
CAS Number:	57194-69-1	Expiry Date:	Sep 08, 2025
Molecular Formula:	C ₉ H ₈ O	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	132.16		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Yellow Liquid
Identification	LCMS&IR&HNMR	Confirmed
Purity	HPLC	98.8103%
Water Content	Karl Fischer	0.6%
Residual Solvents	NMR	0.3% n-hexane
Assay		97.9%
Uncertainty		±2.0%

Comment:

- The compound contains 1.2% trans-Cinnamaldehyde (RT 18.692) according to its HPLC.
- The calculation of the 100% method follows the formula (calculated on the non-dried basis):

$$\text{Assay (\%)} = (100\% - \text{Water Content} - \text{Residual Solvents}) * \text{Purity HPLC (\%)} / 100\%$$
 Water Content and Residual Solvents are considered as absolute effect, HPLC 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:

Hinlam

Aporoved by General manager:

David

Date: Sep 09, 2022

Date: Sep 22, 2022

Date: Sep 22, 2022

