

Certificate of Analysis

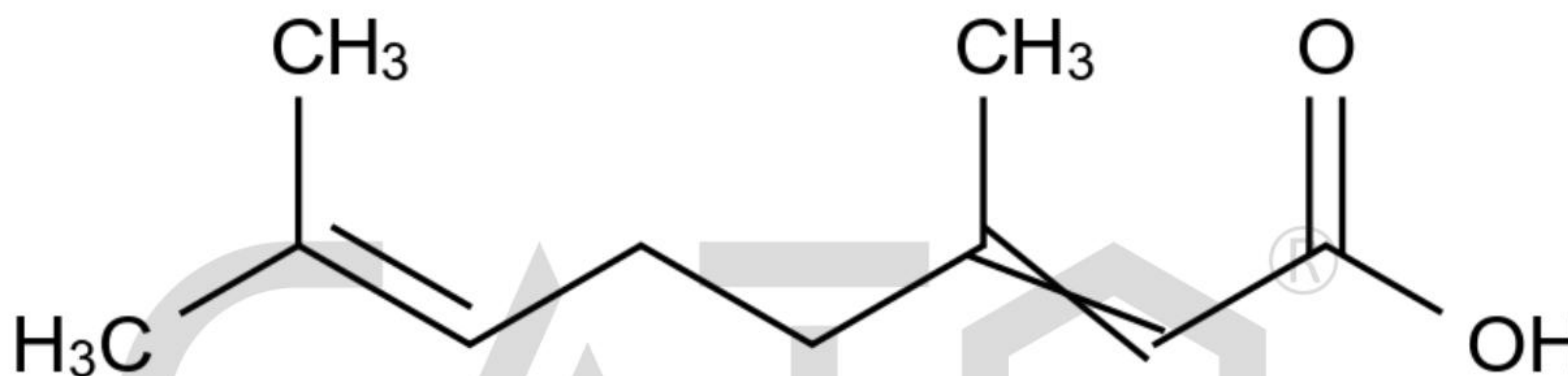
Reference Material & Standard

Product Name:	Geranic acid(mixture of isomers)	Catalogue Number:	CCPE901586
Synonyms:	N/A	Lot Number:	0824-RH-0104
CAS Number:	459-80-3	Expiry Date:	Aug 23, 2030
Molecular Formula:	C ₁₀ H ₁₆ O ₂	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	168.23	Shipping Condition:	Shipping at Room Temperature

Warning:



Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Light Yellow Liquid
Identification	GCMS&HNMR	Confirmed
Purity	GC	96.323%
Loss on Drying	TGA	0.9281%
Assay		95.4%
Uncertainty		±0.7%

Comment:

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

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

Loss on Drying is considered as absolute effect, GC 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:

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Reviewed by:

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Approved by General Manager:

David

Date: Aug 24, 2026

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