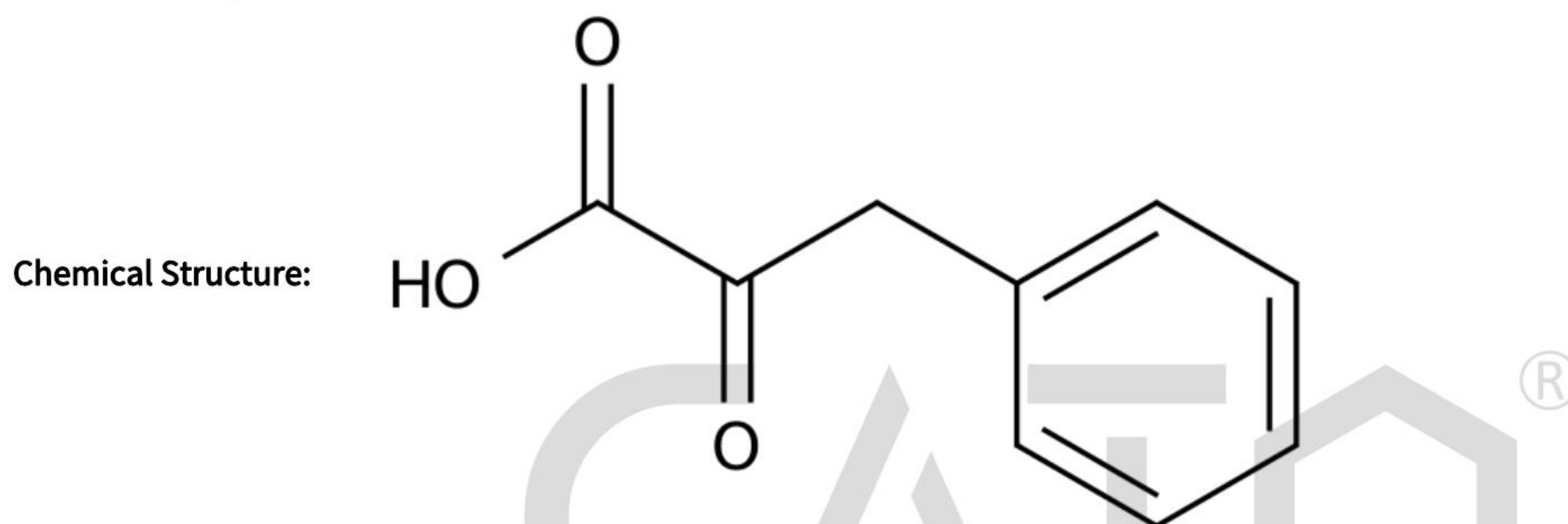


Certificate of Analysis

Reference Material

Product Name:	Phenylpyruvic Acid	Catalogue Number:	CCHM704334
Chemical Name:	N/A	Lot Number:	0510-RD-0065
CAS Number:	156-06-9	Expiry Date:	May 23, 2024
Molecular Formula:	C ₉ H ₈ O ₃	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	164.16		



Test Items	Method	Results
Appearance	Visual inspection	White Powder
Identification	LCMS&DEPT&HNMR	Confirmed
Purity	HPLC	91.621%
Water Content	Karl Fischer	2.7973%
Assay		89.1%
Uncertainty		±2.0%

Comment:

1. Keto-Enol Tautomerism.
2. The calculation of the 100% method follows the formula:

$$\text{Assay (\%)} = (100\% - \text{Water Content}) * \text{Purity HPLC (\%)} / 100\%$$
 Water Content is considered as absolute effect, HPLC purity is considered as relative effect.
3. 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:

Delia

Reviewed by:

Xenia

Aporoved by General manager:

David

Date: May 24, 2022

Date: May 24, 2022

Date: May 24, 2022

