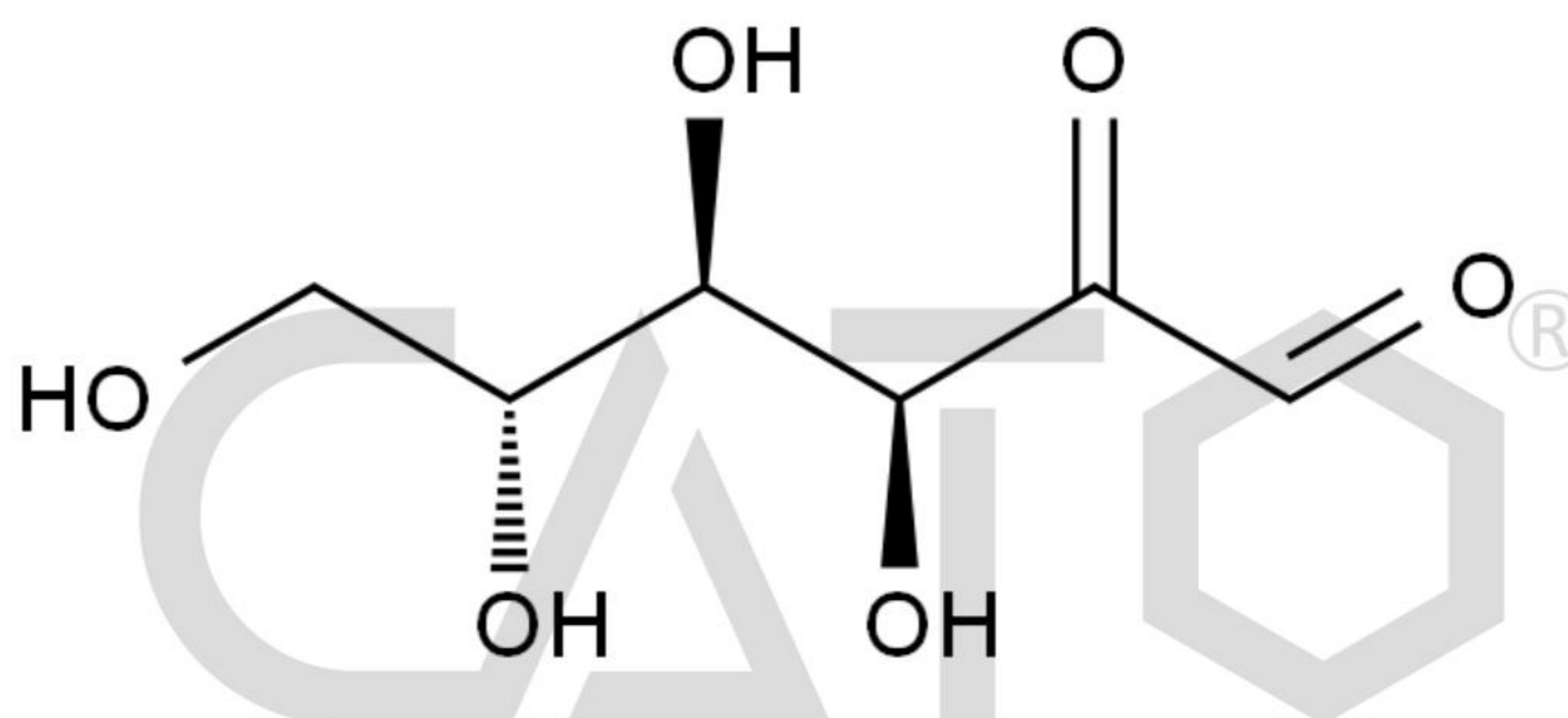


Certificate of Analysis

Reference Material & Standard

Product Name:	2-Keto-D-Glucose	Catalogue Number:	CCHM702819
Synonyms:	N/A	Lot Number:	0126-RH-0147
CAS Number:	1854-25-7	Expiry Date:	Oct 02, 2028
Molecular Formula:	C ₆ H ₁₀ O ₆	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	178.14	Shipping Condition:	Shipping with Ice Packs

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Dark Yellow to Very Dark Yellow Solid
Identification	LCMS&HNMR	Confirmed
Purity	ELSD	97.96%
Water Content	Karl Fischer	8.80%
Assay		89.3%
Uncertainty		±1.0%

Comment:

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

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

Water Content is considered as absolute effect, ELSD 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:

Lisa

Reviewed by:

Hin Lam

Approved by General Manager:

David

Date: Jan 28, 2026

Date: Jan 29, 2026

Date: Jan 29, 2026

