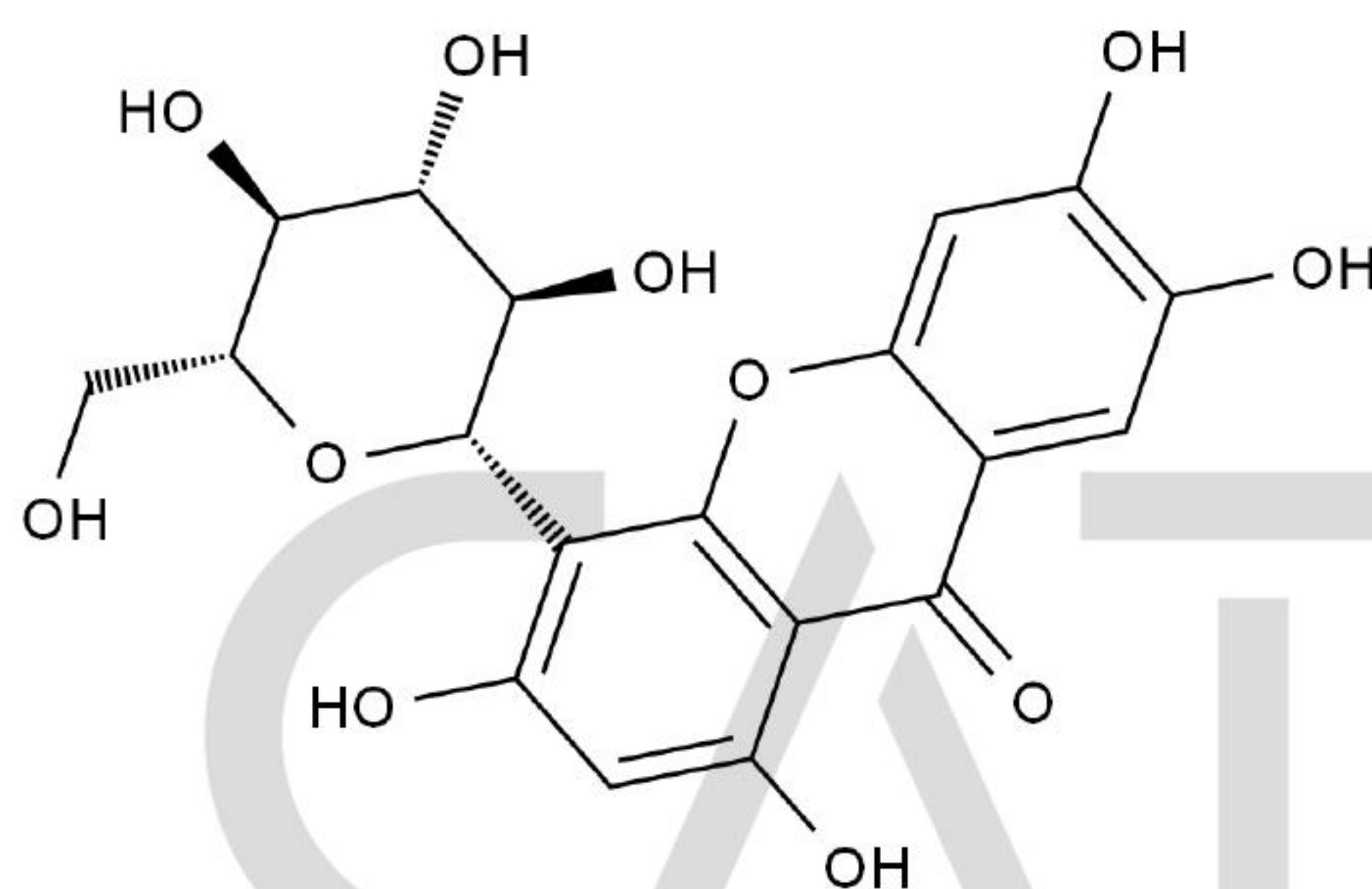


Certificate of Analysis

Reference Material & Standard

Product Name:	Isomangiferin	Catalogue Number:	CCPE900995
Synonyms:	N/A	Lot Number:	0610-RH-0055
CAS Number:	24699-16-9	Expiry Date:	Jun 14, 2030
Molecular Formula:	C ₁₉ H ₁₈ O ₁₁	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	422.34	Shipping Condition:	Shipping at Room Temperature

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Yellow Solid
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	99.890%
Loss on Drying	TGA	9.8699%
Assay		90.0%
Uncertainty		±1.1%

Comment:

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

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

Loss on Drying is considered as absolute effect, HPLC 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:

Nice

Reviewed by:

Koi

Approved by General Manager:

David

Date: Jun 15, 2026

Date: Jun 15, 2026

Date: Jun 15, 2026



Add: 3rd Floor, Building B, No.179, Guangpu Rd East, Huangpu District, Guangzhou, China

Tel: +86-20-81960175

Email: supports@cato-chem.com

Web: <https://www.cato-chem.com>

