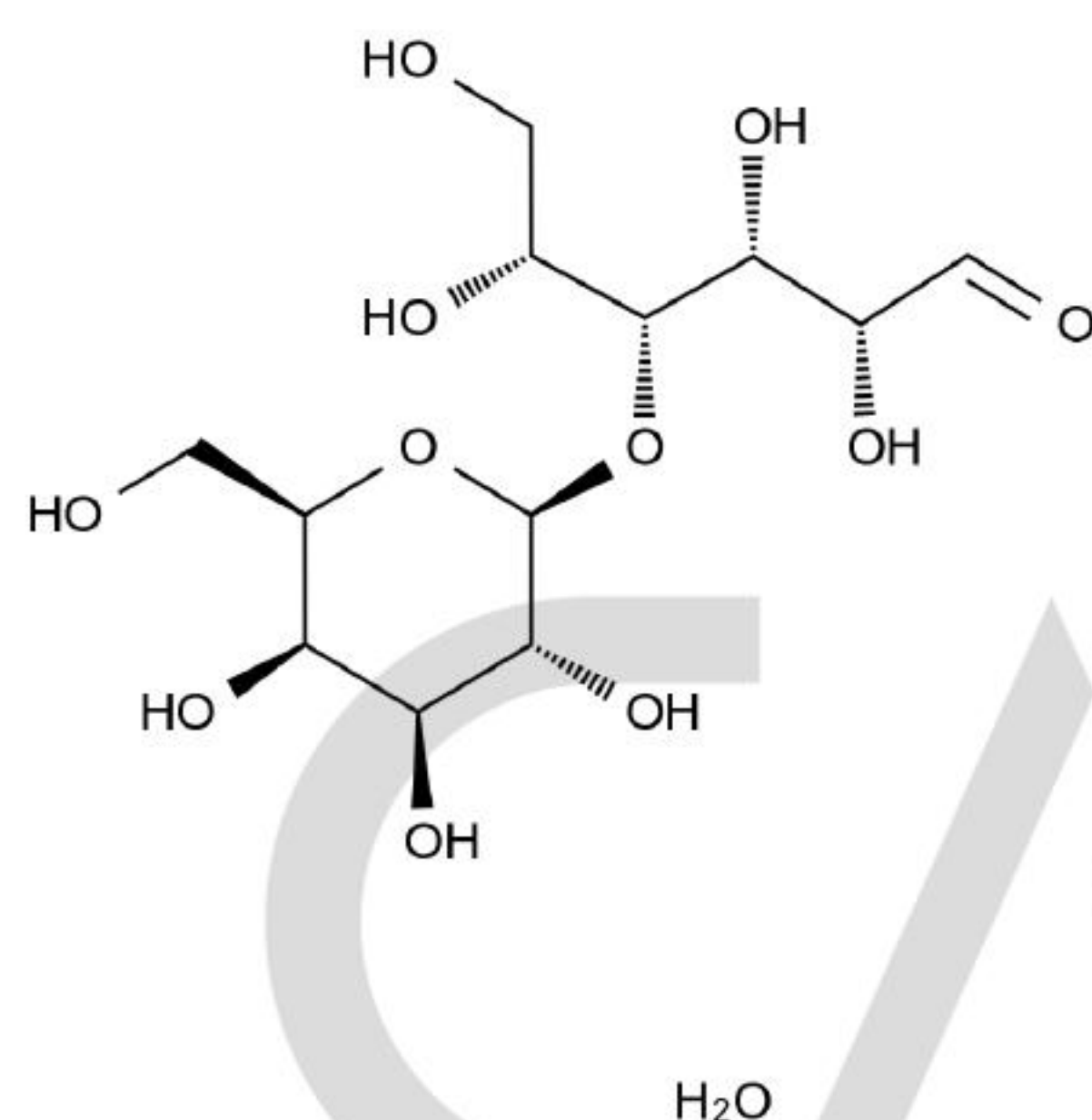


Certificate of Analysis

Reference Material & Standard

Product Name:	D-(+)-Lactose Monohydrate	Catalogue Number:	CCFD201440
Synonyms:	N/A	Lot Number:	1214-RE-0049
CAS Number:	64044-51-5	Expiry Date:	Jul 07, 2030
Molecular Formula:	C ₁₂ H ₂₂ O ₁₁ · H ₂ O	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	342.30 18.02	Shipping Condition:	Shipping at Room Temperature

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&HNMR	Confirmed
Purity	ELSD	100.000%
Loss on Drying	TGA	5.0141%
Loss on Drying(Free Water)		0.0130%
Assay		99.99%
Uncertainty		±0.2%

Comment:

- The content of crystal water is 5.0011%.
- The calculation of the mass balance method follows the formula (calculated on the non-dried basis):

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

Loss on Drying(Free Water) is considered as absolute effect, ELSD 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:

Nice

Reviewed by:

Lisa

Approved by General Manager:

David

Date: Jul 08, 2026

Date: Jul 09, 2026

Date: Jul 09, 2026

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