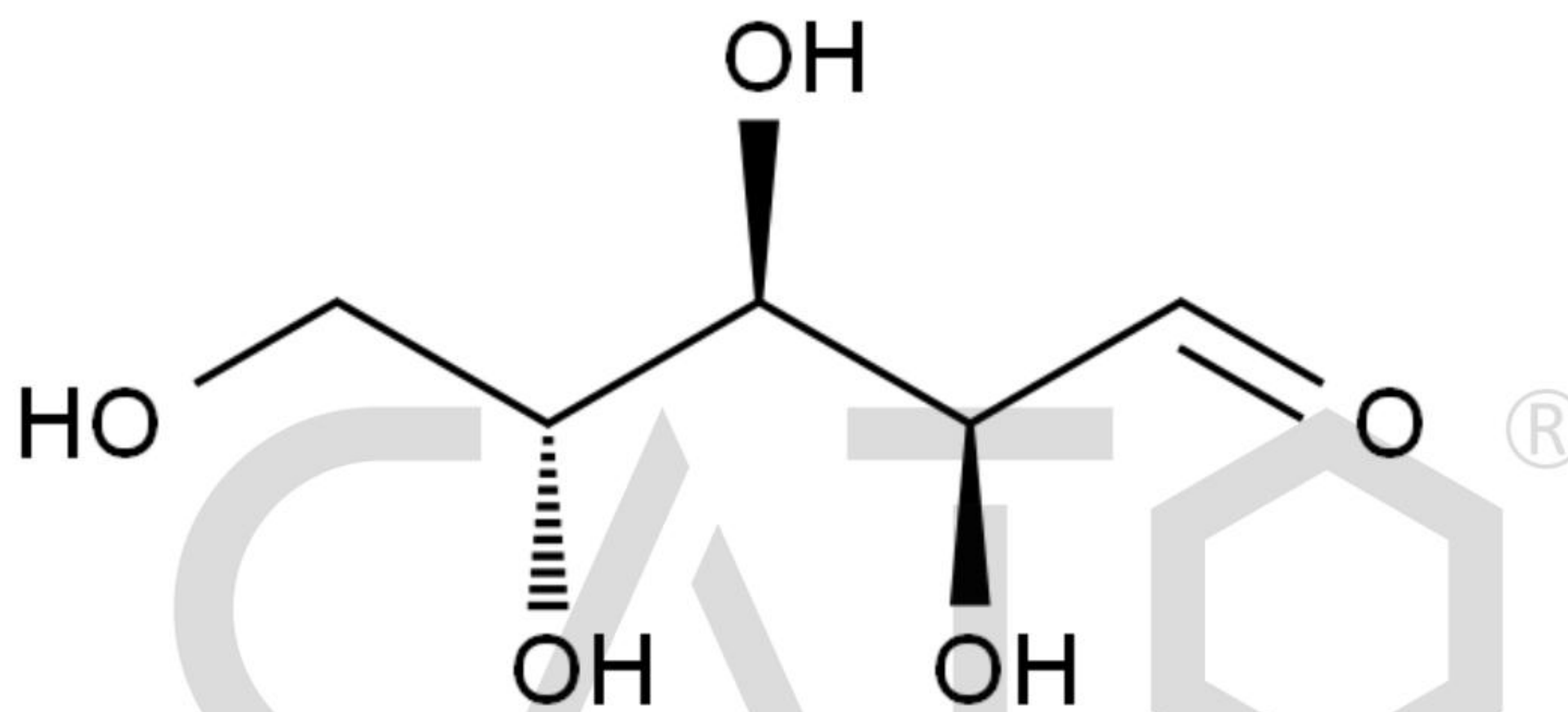


# Certificate of Analysis

## Reference Material & Standard

|                    |                                               |                   |                                           |
|--------------------|-----------------------------------------------|-------------------|-------------------------------------------|
| Product Name:      | DL-Arabinose                                  | Catalogue Number: | CCFD200757                                |
| Synonyms:          | N/A                                           | Lot Number:       | 0617-RF-0045                              |
| CAS Number:        | 147-81-9                                      | Expiry Date:      | Jun 16, 2028                              |
| Molecular Formula: | C <sub>5</sub> H <sub>10</sub> O <sub>5</sub> | Storage:          | Room Temp Protected from light and Sealed |
| Molecular Weight:  | 150.13                                        |                   |                                           |

Chemical Structure:



| Test Items     | Method            | Results     |
|----------------|-------------------|-------------|
| Appearance     | Visual inspection | White Solid |
| Identification | LCMS&HNMR         | Confirmed   |
| Purity         | ELSD              | 100.000%    |
| Loss On Drying | TGA               | 0.2881%     |
| Assay          |                   | 99.7%       |
| Uncertainty    |                   | ±2.0%       |

## Comment:

1. The calculation of the 100% method follows the formula (calculated on the non-dried basis):

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

Loss On Drying 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:

*Nice*

Reviewed by:

*Lisa*

Approved by General Manager:

*David*

Date: Jun 17, 2024

Date: Jun 17, 2024

Date: Jun 17, 2024

