



CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by Intertek. Certificate

Number. 2317548

Catalogue Number 16135
Lot Number A0476655

Description D(-)-Fructose,99%

CAS Number 57-48-7
Quality Test/Release Date 28/Oct/2025
Suggested retest date 28/Oct/2028
Country of Origin FINLAND
Declaration of Origin plant

BSE/TSE extracted from sugar beet and sugar cane

| Result Name | Units | Specifications | Test Value |
|---------------------------|-------|--|--|
| Appearance (Color) | | White | White |
| Appearance (Form) | | Crystalline powder or crystals | crystals |
| Infrared spectrum | | Conforms | Conforms |
| HPLC | % | >=98.5 | >=99.5 |
| Water | % | =<0.5 (K.F.) | 0.1 (K.F.) |
| Heavy metals (as Pb) | ppm | =<10 | =<10 |
| Sulfated ash | % | =<0.1 | 0.01 |
| Specific optical rotation | | -91.0° to -93.5° (20°C, 589 nm) (c=10. H2O/NH3) | -93.0° (20°C, 589 nm) (c=10, H2O/NH3) |
| Specific optical rotation | | After 30 min, On dry substance | After 30 min, On dry substance |
| Chloride (CI) | ppm | =<50 | =<40 |
| Sulfate (SO4) | ppm | =<50 | =<50 |
| Solubility | | (2.5 gram in 10 ml water) Clear and colourless | (2.5 gram in 10 ml water) Clear and colourless |

Geert Torfs Supervisor, QC

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.