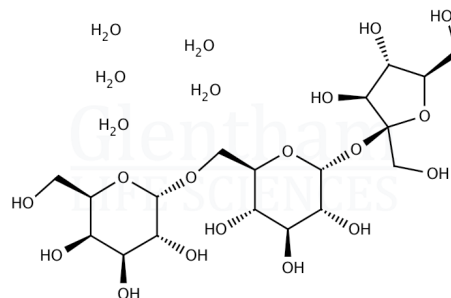


Certificate of Analysis

Product Name D-Raffinose pentahydrate
Glentham Code GC4633
CAS Number 17629-30-0
EINECS 208-146-9
MDL Number MFCD00071590
PubChem SID 310279593
Batch Number 997ZFT

Molecular Weight 594.52
Molecular Formula $C_{18}H_{32}O_{16} \cdot 5H_2O$
Storage Temp. +20°C



Property	Specification	Batch 997ZFT
Physical Description	White or almost white crystalline powder	White powder
Identification (IR)	To conform to standard	Conforms
Solubility (5% in water)	Clear, colourless solution	Conforms
Specific Optical Rotation	+103.0 - +108.0 ° (c=10, water)	+104.2°
Melting Point	78.0 - 82.0 °C	79.0 - 80.5 °C
Residue on Ignition	≤ 0.1%	0.03%
Heavy Metals	≤ 10ppm	Conforms
Loss on Drying	13.0 - 17.0 %	14.75%
Assay (HPLC)	≥ 98.0%	98.91%

Specification Version v1.2
Manufacture Date 2020-03-13
Re-Test Date 2027-12-09

Glentham Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check www.glentham.com or contact us using the details above for the current version of this document.

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