

Certificate of Analysis

Date of Testing: 2024-02-29 09:38:59
Date of Next Testing: 2028-02-28 09:38:59
Product Name: **D-(+)-Trehalose dihydrate**
CAS Number: 6138-23-4
Specifications & Purity: from cassava starch, $\geq 99\%$
Lot #: B24261020
SKU #: **T100010**
Analysis: **319255**
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(HPLC)	99-100 (%)	99.44600 %
Solvent Content(GC)	0-5 (%)	2.04 %
Water by Karl Fischer	9.2-10.2 (%)	9.20 %
Specific Rotation $[\alpha]_{20/D}(c=7 \text{ in H}_2\text{O})$	178-183 ($^{\circ}$)	178.10 $^{\circ}$
Appearance (T100010)	white to off-white powder, crystals and/or chunks	white to off-white powder, crystals and/or chunks
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in H ₂ O , Colorless to Faint Yellow , Clear , 50 mg/ml H ₂ O	pass	Pass



John Su
QA & QC Manager