



Certificate of Analysis

D-(+)-Raffinose Pentahydrate

Catalog Number: RP1001
Lot Number: 0212901
CAS Number: 17629-30-0; 512-69-6
Synonym(s): O- α -D-Galactopyranosyl-(1 \rightarrow 6)- α -D-glucopyranosyl β -D-fructofuranoside, Melitose, Melitriose
Molecular Formula: C₁₈H₃₂O₁₆ • 5H₂O
Molecular Weight: 594.51
Storage: 15°C – 30°C
Date of Manufacture: January 15, 2019
Retest Date: December 20, 2020

Test	Specification	Result
Appearance	White powder	Conforms
Assay (HPLC)	$\geq 98\%$	99.1%
Purity (TLC)	One spot	Conforms
Specific Rotation	+103 to +107	+104°
Melting Point	78°C – 80°C	78.0°C
Moisture (KF)	13.0 – 16.0%	14.8%
Ash	$\leq 0.1\%$	0.06%

Approved by:

John Grubb, PhD
Gojira Fine Chemicals, LLC
Quality Manager
Tel: 440-539-7033 Fax: 888-211-5523
john@gojiraafc.com

Date: February 12, 2019