

## Certificate of Analysis

Date of Testing: 2025-09-05 16:56:31  
Date of Next Testing: 2029-09-04 16:56:31  
Product Name: **D(+)-Raffinose pentahydrate**  
CAS Number: 17629-30-0  
Specifications & Purity:  $\geq 99\%$   
Lot #: I2504690  
SKU #: **R111688**  
Version: **0**  
Analysis #: **563156**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Water by Karl Fischer	14-16 (%)	14.83 %
Specific Rotation $[\alpha]_{20/D}(c=10 \text{ in H}_2\text{O})$	100-110 ( $^{\circ}$ )	100.24 $^{\circ}$
Melting point	78-82 ( $^{\circ}\text{C}$ )	81.92000 $^{\circ}\text{C}$
Purity(HPLC)	99-100 (%)	99.83900 %
Appearance (R111688)	white powder	White powder
Solubility, 50mg/ml water	Clear colorless	Clear Colorless
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager