

## Certificate of Analysis

Date of Testing: 2023-03-17 13:08:23  
Date of Next Testing: 2027-03-16 13:08:23  
Product Name: **Isosorbide**  
CAS Number: 652-67-5  
Specifications & Purity: >98.0%(GC)  
Lot #: C23111243  
SKU #: **I157515**  
Version: **0**  
Analysis #: **176008**  
Storage Temperature: Argon charged

| Parameter  | Limit Values          | Result                |
|--|-----------------------|-----------------------|
| Specific Rotation [a] <sub>D</sub> 20/D(c=5 in H <sub>2</sub> O) | 43-47 (°)             | 45.12°                |
| Melting point  | 58-63 (°C)            | 61.27000 °C           |
| Purity(GC)   | 98-100 (%)            | 98.18%                |
| Proton NMR spectrum  | Conforms to Structure | Conforms to Structure |



John Su  
QA & QC Manager