

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2026-06-05 10:52:16  
 Date of Next Testing: 2029-06-04 10:52:16  
 Product Name: **Isopropyl beta-D-thiogalactoside (IPTG)**  
 CAS Number: 367-93-1  
 Specifications & Purity:  $\geq 98\%$   
 Lot #: E2629057  
 SKU #: **I104812**  
 Version: **0**  
 Analysis #: **698321**  
 Storage Temperature: Store at 2-8°C, Argon charged

| Parameter                                                             | Limit Values              | Result                    |
|-----------------------------------------------------------------------|---------------------------|---------------------------|
| Carbon by Elemental Analysis                                          | 43.50-46.3 (%)            | 45.02200 %                |
| Purity(HPLC)                                                          | 98-100 (%)                | 99.86000 %                |
| Water by Karl Fischer                                                 | 0-5 (%)                   | 0.25690 %                 |
| Specific Rotation $[\alpha]_{20/D(c=1 \text{ in H}_2\text{O})}$       | -35--29 (°)               | -29.98700 °               |
| Melting point                                                         | 109-121 (°C)              | 112.61000 °C              |
| Appearance (I104812Color)                                             | White to off-white        | White to off-white        |
| Appearance (I104812Form)                                              | Powder, Needles, Crystals | Powder, Needles, Crystals |
| D2O NMR spectrum                                                      | Conforms to Structure     | Conforms to Structure     |
| Solubility in H <sub>2</sub> O , Colorless Clear(49.00 - 51.00 mg/ml) | pass                      | Pass                      |



John Su  
QA & QC Manager