

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-12-27 10:06:55
Date of Next Testing: 2028-12-26 10:06:55
Product Name: **Isopropyl beta-D-thiogalactoside (IPTG)**
CAS Number: 367-93-1
Specifications & Purity: $\geq 98\%$
Lot #: L2524466
SKU #: **I104812**
Version: **0**
Analysis #: **626152**
Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Carbon by Elemental Analysis	43.50-46.3 (%)	45.56 %
Purity(HPLC)	98-100 (%)	99.73500 %
Water by Karl Fischer	0-5 (%)	0.13 %
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in H}_2\text{O})$	-35--29 (°)	-32.27 °
Melting point	109-121 (°C)	111.82000 °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 ₂ O, Colorless Clear(49.00 - 51.00 mg/ml)	pass	Pass



John Su
QA & QC Manager