

Certificate of Analysis

Date of Testing: 2025-06-21 09:08:32

Date of Next Testing: 2028-06-20 09:08:32

Product Name: **Isopropyl beta-D-thiogalactoside (IPTG)**

CAS Number: 367-93-1

Specifications & Purity: $\geq 98\%$

Lot #: F2519688

SKU #: **I104812**

Version: **0**

Analysis #: **517326**

Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Carbon by Elemental Analysis	43.50-46.3 (%)	45.20 %
Purity(HPLC)	98-100 (%)	100.00000 %
Water by Karl Fischer	0-5 (%)	0.72 %
Melting point	109-121 (°C)	113.65000 °C
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in H}_2\text{O})$	-35--29 (°)	-32.09 °
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