



Certificate of analysis

Product name: IPTG (Isopropyl-beta-D-thiogalactopyranoside)

Cas number: 367-93-1

Molecular Formula: $C_9H_{18}O_5S$

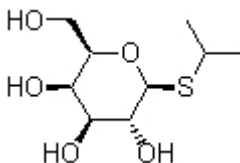
Molecular Weight: 238.30

Date of production: Mar. 16, 2013

Batch NO: 20130316

EXP DATE: Mar. 15, 2015

Chemical structure:



Items	Specifications	Results
Description	white crystalline powder	Conform
Solubility	Soluble in water and methanol	Conform
Identification by IR	The IR spectrum of the sample should be concordant with the working standard.	Conform
PH5% in water	5.0-7.0	6.45
Absorbance 5% w/v Soluble in water. (a) 300 nm (b) 400 nm	Not more than 0.15 Not more than 0.06	0.10 0.01
Melting Range	110oC - 114oC	110oC - 113oC
Moisture Content by KF	NMT1.0% w/w	0.33% w/w
1,4-Dioxane	Should be absent	Not detected
Specific Optical Rotation	-28.5o to -34.5o	-31.27o
Purity by HPLC	NLT 98.00%	99.75%
Assay by HPLC	98 - 101% w/w	99.63%

Conclusion: It complies with the Enterprise Standard.

Analyst: Zhao

Checker: Liu

Q.C Director: Fang

