

## Analytical Data Sheet

Lot number **1075595**  
not for drug use

Catalog number **Q-2060.0005**  
Product number **4026913.0005**  
Product **IPTG (dioxane free)**  
Isopropyl- 1- thio-  $\beta$ - D- galactopyranoside (dioxane free)  
Molecular formula **C<sub>9</sub>H<sub>18</sub>O<sub>5</sub>S**  
Relative molecular mass **238.31**

Tests	Results
Appearance	white powder
Appearance of solution	clear, colorless solution (50 mg/mL in water)
Identification (TLC)	complies with authentic material
Specific optical rotation	$[\alpha]_D^{20} = -31.7^\circ$ (1.5% water)
Purity (TLC)	> 98%
TLC conditions	chloroform/methanol/toluene/H <sub>2</sub> O 8/8/8/1 chloroform/methanol/acetic acid 32% 5/3/1 plate: silicagel 60 F <sub>254</sub> detected by: UV, ammoniummolybdate
Assay (elemental analysis)	99.7% (Cth 45.36%, Cfd 45.22%)
Water content (KF volumetric)	0.4%
Residual organic solvents (GC)	0.004% (dioxane)

Latest update: February 08, 2018

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