

## Product Datasheet

### GC6586 - IPTG

Pictograms

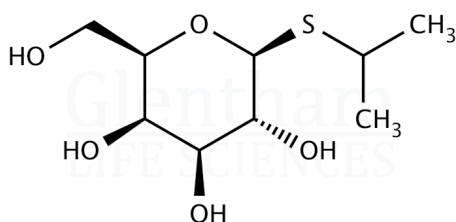


#### Product Details

Product Name	IPTG
Glenthams Code	GC6586
CAS Number	367-93-1
EINECS	206-703-0
MDL-Nummer	MFCD00063273
PubChem SID	310275355
Related Categories	Carbohydrates, Biochemicals, Detergents, Enzyme Substrates

#### Structure

Molecular Weight	: 238.30
Molecular Formula	: C <sub>9</sub> H <sub>18</sub> O <sub>5</sub> S



#### Storage

Recommended storage temperature: +4°C.

#### Hazards and Transport

Not classified as dangerous for transport.	
CLP Classification	Carc. 2, Eye Irr. 2A
Signal Word	Achtung
Hazard Codes	H351, H319
Precautionary Codes	P281, P305+P351+P338, P308+P313, P264

#### Glenthams Product Specification

Physical Description	: White crystalline powder
Solubility	: Soluble in water and methanol
Identification	: IR
pH	: 5.0 - 7.0 (5% in water)
UV Absorbance (5% in water)	: 300nm: ≤ 0.15 400nm: ≤ 0.06
Melting Point	: 110 - 114 °C
Water (KF)	: ≤ 1.0%
Individual Impurity	: 1,4-Dioxane: Absent
Specific Optical Rotation ([α] <sub>20/D</sub> )	: -28.5 - -34.5 ° (c=1, water)
Purity (HPLC)	: ≥ 98.0%
Assay (HPLC)	: 98.0 - 101.0 %
Version	: v1.0

#### About IPTG

IPTG is a compound commonly used in molecular biology, particularly in the study and use of the lac operon. It mimics the action of allolactose by binding to the lac repressor but, unlike its analogue, does not get hydrolyzed in the cell and so allows for the lac operon to be expressed at particularly high levels. This method is commonly utilised in the study of genetics and protein expression. Our product is dioxane free and is produced using raw materials of non-animal origin.

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