

Product Specification

GMP Manufactured Product

| Test | Specification |
|------------------------------------------------|-----------------|
| Appearance (white to off-white solid) | Passes Test |
| Identification (IR) | Passes Test |
| pH of 5% Solution | 5.00 – 7.00 |
| Specific Rotation @ 25 °C | -34.5 – -28.5 ° |
| Melting Point | 110 – 122 °C |
| Water (H ₂ O), For Information Only | % |
| Purity (by HPLC) (anhydrous basis) | ≥ 98 % |
| Assay (by HPLC) (anhydrous basis) | 98 – 102 |
| Endotoxin Concentration, EU/g | |
| Residual Methanol | ≤ 3000 ppm |
| Residual Ethanol | ≤ 5000 ppm |
| Residual Isopropanol | ≤ 5000 ppm |
| Residual Ethyl Acetate | ≤ 5000 ppm |
| Total Aerobic Microbial Count | ≤ 100 CFU/g |
| Total Yeast and Mold Count | ≤ 100 CFU/g |
| Biological Induction Characterization (i | |
| Arsenic (As), For Information Only | ppm |
| Cadmium (Cd), For Information Only | ppm |
| Mercury (Hg), For Information Only | ppm |
| Lead (Pb), For Information Only | ppm |
| Cobalt (Co), For Information Only | ppm |
| Nickel (Ni), For Information Only | ppm |
| Vanadium (V), For Information Only | ppm |
| Silver (Ag), For Information Only | ppm |
| Gold (Au), For Information Only | ppm |
| Iridium (Ir), For Information Only | ppm |
| Osmium (Os), For Information Only | ppm |
| Palladium (Pd), For Information Only | ppm |

>>> Continued on page 2 >>>

| Test | Specification |
|---------------------------------------|---------------|
| Platinum (Pt), For Information Only | ppm |
| Rhodium (Rh), For Information Only | ppm |
| Ruthenium (Ru), For Information Only | ppm |
| Selenium (Se), For Information Only | ppm |
| Thallium (Tl), For Information Only | ppm |
| Barium (Ba), For Information Only | ppm |
| Chromium (Cr), For Information Only | ppm |
| Copper (Cu), For Information Only | ppm |
| Lithium (Li), For Information Only | ppm |
| Molybdenum (Mo), For Information Only | ppm |
| Antimony (Sb), For Information Only | ppm |
| Tin (Sn), For Information Only | ppm |
| Aluminum (Al), For Information Only | ppm |
| Iron (Fe), For Information Only | ppm |
| Manganese (Mn), For Information Only | ppm |
| Zinc (Zn), For Information Only | ppm |

>>> Continued on page 3 >>>

Isopropyl-beta-D-thiogalactopyranoside
IPTG



Material No.: V264-01

Test

Specification

GMP Manufactured Product

CAUTION: For Manufacturing, processing or repackaging

Residual Solvents: The Class 3 solvents Ethanol, Isopropanol, Ethyl Acetate and the Class 2 solvent Methanol are likely to be present. These solvents are quantified and reported on each batch. No other Class 1,2,3, or other solvents are used or produced in the production process. Dioxane was not used in the manufacturing process.

Bacterial Induction characterization: Test performed at 1 mM of IPTG (E. Coli. protein expression)

IPTG is highly hygroscopic. Allow packaging/container to equilibrate to room temperature before opening for analysis. Ensure sample is kept dry (such as in a desiccator) after opening.

Storage Condition: Store and ship product between 2 and 8 °C

Packaging Site: Phillipsburg Mfg Ctr & DC