

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

|              |  |
|--------------|--|
| Product name | Isopropyl- $\beta$ -D-thiogalactopyranoside                      |
| CAS number   | 367-93-1   |
| Synonyms     | IPTG, Isopropyl- $\beta$ -D-thiogalactopyranoside (Dioxane-free) |

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses            Laboratory chemicals.

#### 1.3 Details of the supplier of the safety data sheet

|           |  |
|-----------|--|
| Company   | Lab Alley, LLC<br>12501 Pauls Valley Road<br>Austin, Texas 78737<br>U.S.A. |
| Telephone | 512-668-9918   |
| Fax       | 512-886-4008   |

#### 1.4 Emergency telephone

|                          |                              |          |
|--------------------------|------------------------------|----------|
| <b>Emergency Phone #</b> | US & Canada: 1-800-535-5053  | INFOTRAC |
|                          | International 1-352-323-3500 | INFOTRAC |

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### **GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### 2.2 GHS Label elements, including precautionary statements

Pictogram                None required.

|                          |                |
|--------------------------|----------------|
| Signal Word              | None required. |
| Hazard statements        | None required. |
| Precautionary statements | None required. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

| Chemical name                               | Common name and synonyms   | CAS number | Concentration |
|---|--|------------|---------------|
| Isopropyl- $\beta$ -D-thiogalactopyranoside | IPTG, Isopropyl- $\beta$ -D-thiogalactopyranoside (Dioxane-free) | 367-93-1   | > 98%         |

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

|                                |   |
|--------------------------------|---|
| <b>If inhaled</b>              | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.      |
| <b>In case of skin contact</b> | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. |
| <b>In case of eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.   |
| <b>If swallowed</b>            | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.             |

### 4.2 Most important symptoms and effects, both acute and delayed

None reasonably foreseeable.

### 4.3 Indication of any immediate medical attention and special treatment needed

Note to Physician: Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

**Unsuitable extinguishing media** No information available.

## 5.2 Specific hazards arising from the substance or mixture

Keep product and empty container away from heat and sources of ignition.

## 5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 5.4 Further information

**Flash Point** > 110 °C / > 230 °F

**Autoignition Temperature** No information available.

### Explosion limits

**Upper** No information available.

**Lower** No information available.

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

### NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 2      | 1            | 1           | N/A              |

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

### 6.2 Environmental precautions

Should not be released into the environment.

### 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. To maintain product quality: Keep refrigerated. Store under an inert atmosphere. Protect from moisture.

#### Incompatibilities

Strong oxidizing agents.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### 8.2 Exposure controls

#### Appropriate engineering controls

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

#### Personal protective equipment

##### Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Tight sealing safety goggle.

##### Skin protection

Impervious gloves.

##### Body Protection

Wear appropriate clothing.

### Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Control of environmental exposure

Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|  |   |
|--|---|
| Physical State                         | Solid   |
| Appearance                             | White   |
| Odor                                   | No information available.                       |
| Odor Threshold                         | No information available.                       |
| pH                                     | 5-7 5% aq. solution                             |
| Melting Point/Range                    | 105 °C / 221 °F                                 |
| Boiling Point/Range                    | No information available.                       |
| Evaporation Rate                       | Not applicable.                                 |
| Flammability (solid)                   | No information available.                       |
| Flammability or explosive limit        |   |
| Upper                                  | No information available.                       |
| Lower                                  | No information available.                       |
| Vapor Pressure                         | No information available.                       |
| Vapor Density                          | Not applicable.                                 |
| Density                                | No information available.                       |
| Solubility                             | Soluble in water,                               |
| Partition coefficient; n-octanol/water | No information available.                       |
| Autoignition Temp                      | No information available.                       |
| Decomposition Temp                     | No information available.                       |
| Viscosity                              | Not applicable.                                 |
| Molecular Formula                      | C <sub>9</sub> H <sub>18</sub> O <sub>5</sub> S |
| Molecular Weight                       | 238.31  |
| VOC Content(%)                         | No information available.                       |
| Oxidizing properties                   | None.   |

### 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

None known, based on information available.

### 10.2 Chemical stability

Hygroscopic.

**10.3 Possibility of hazardous reactions**

None under normal processing.

**10.4 Conditions to avoid**

Incompatible products. Excess heat. Avoid dust formation. Exposure to moisture. Exposure to moist air or water.

**10.5 Incompatible materials**

Strong oxidizing agents.

**10.6 Hazardous decomposition products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Sulfur oxides.

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Product Information, Component Information**

**Acute toxicity**

No acute toxicity information is available for this product.

**Skin corrosion/irritation**

Irritating to skin and respiratory system.

**Serious eye damage/eye irritation**

Irritating to eyes.

**Respiratory or skin sensitization**

No information available.

**Germ cell mutagenicity**

No information available.

**Carcinogenicity**

| Component                           | CAS      | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|-------------------------------------|----------|------------|------------|------------|------------|------------|
| Isopropyl-β-D-thiogalactopyranoside | 367-93-1 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Specific target organ toxicity - single exposure**

None known.

**Specific target organ toxicity - repeated exposure**

None known.

**Reproductive toxicity**

No information available.

**Chronic effects**

No information available.

**11.2 Additional Information**

The toxicological properties have not been fully investigated.

**SECTION 12: Ecological information****12.1 Toxicity**

Do not empty into drains.

**12.2 Persistence and degradability**

Soluble in water. Persistence is unlikely based on information.

**12.3 Bio accumulative potential**

No information available.

**12.4 Mobility in soil**

Will likely be mobile in the environment due to its water solubility.

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Endocrine disrupting properties**

No information available.

**12.7 Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1 Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

**SECTION 14: Transport information****DOT (US)**

Not regulated.

**IMDG**

Not regulated.

**IATA**

Not regulated.

**SECTION 15: Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

Not listed.

**SARA 313 (TRI reporting)**

Not listed.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act**

Not regulated.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not regulated.

**US state regulations**

**US. Massachusetts RTK - Substance List**

Not listed.



**US. New Jersey Worker and Community Right-to-Know Act**

Not listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

**California Proposition 65**

Not listed.

**SECTION 16: Other information**

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**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.