

# Safety Data Sheet

# Section 1. Product and Company Identification

Product Name Isopropyl Thiogalactoside

Product ID 17356

**Chemical Name** (Synonyms)

Isopropyl β-D-thiogalactoside, IPTG

LKT Laboratories, Inc.

545 Phalen Blvd. **Supplier** St. Paul, MN 55130 USA

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**Emergency Phone #** 1-800-424-9300

## Section 2. Hazards Identification

Specific target organ toxicity - single exposure, Respiratory H335 **GHS Classification** 

Carcinogenicity (Category 2) H351

# GHS Label elements including precautionary statements

**Pictogram** 



Signal word

Warning

# Hazard and precautionary statements

## **Hazard statement**

H335 - May cause respiratory irritation. H351 - Suspected of causing cancer.

### Precautionary statements

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood. P281 - Use personal protective equipment as required.

P308 + P313 - IF exposed or concerned: Get medical advice/ attention.

P405 - Store locked up.

P501 - Dispose of contents/ container to an approved waste disposal plant.

**HMIS Classification** Health hazard: 0

Chronic health hazard: \* Flammability: 0
Physical hazard: 0

**NFPA Rating** 

Health hazard: 0 Fire hazard: 0 Reactivity hazard: 0

**Potential Health Effects** 

Inhalation - May be harmful if inhaled. May cause respiratory tract irritation. Skin - May be harmful if absorbed through skin. May cause skin irritation. Eyes - Causes serious eye irritation. Ingestion - May be harmful if swallowed.

## Section 3. Composition/Information on Ingredients

Substances Ingredient: Title Compound Percent: 100

Formula  $C_9H_{18}O_5S$  Formula Wt. 238.30 CAS No. 367-93-1 EC No. 204-661-8

## **Section 4. First Aid Measues**

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Eye Contact** 

Flush eyes with water as a precaution.

**Skin Contact** 

Wash off with soap and plenty of water. Consult a physician.

Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## Section 5 . Firefighting Measures

**Flash Point** 

Not available.

Not available.

**Extingushing Media** 

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Firefighting Procedures** 

Wear self-contained breathing apparatus for firefighting if necessary.

Unusual Fire Hazards

**Personal Precautions** 

Use personal protective equipment. Avoid dust formation. Avoid breathing dust, vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental Precautions** 

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Section 6. Accidental Release Measures

Methods and materials for containment and cleanup

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

# Section 7. Handling and Storage

Handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

**Storage Conditions** 

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -20°C

Hazardous Decomposition Products Hazardous decomposition products formed under fire conditions. - Carbon oxides, sulfur oxides.

Other Remarks

Hygroscopic. Protect from light.

## Section 8. Exposure Controls/Personal Protection

# Personal protective EXPOSURE CONTROLS

equipment Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

# PERSONAL PROTECTION

Eye/face protection: Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). **Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full and splash contact: Material: Nitrile rubber, Minimum layer thickness: 0.11 mm, Break through time: 480 min., Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M).

Body protection: Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# Section 9. Physical and Chemical Properties

Solid. White flakes. **Physical State** Color

Not available. Not available. **Boiling Point** Volatility

110-114°C Not available.

**Melting Point** Density

Soluble in water. Not available. Solubility pН

Ignition **Flash Point** temperature

Not available.

Not available. Not available. **Autoignition** Lower explosion limit

temperature

Not available. Not available. Vapor

**Upper explosion limit** pressure

Soluble in water. Not available.

Water solubility Odor

Partition coefficient: Not available. Not available. Odor

n-octanol/water **Threshold** 

Relative vapor density Not available. Not available. **Evaporation** 

Not available.

# Section 10. Stability and Reactivity

Stability

Stable under recommended storage conditions.

**Materials To Avoid** 

Strong oxidizing agents.

Decomposition Products

Hazardous Hazardous decomposition products formed under fire conditions. - Carbon oxides, sulfur oxides.

Exposure to moisture.

Conditions to avoid

### Section 11. Toxicological Information

Oral LD50 Not available. Skin Not available.

corrosion/irritation

Inhalation LC50 Not available. Serious eye Not available.

damage/irritation

Dermal LD50 Not available. Respiratory or Not available.

skin sensitization

Germ cell mutagenicity Not available. Other information on Not available.

acute toxicity

Reproductive Toxicity Not available. Aspiration Hazard Not available.

Specific organ toxicity Not available. Synergistic effects Not available.

single exposure (GHS)

Specific organ toxicity Not available. repeated exposure (GHS)

Additional Information RTECS: Not available.

To the best of our knowledge, the chemical, physical and toxicological properties have not

been thoroughly investigated.

Signs and symptoms Liver - irregularities - based on human Teratogenicity Not available.

of exposure evidence.

Potential Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.

Health Effects

Skin - May be narmful if absorbed unload to the Eyes - Causes serious eye irritation.
Ingestion - May be harmful if swallowed.
Carcinogenicity - Suspected of causing cancer.
Specific target organ toxicity - single exposure - May cause respiratory irritation.

**Carcinogenicity IARC:** 2B - Group 2B: Possibly carcinogenic to humans (1,4-Dioxane). **NTP:** Reasonably anticipated to be a human carcinogen (1,4-Dioxane).

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by OSHA.

Section 12. Ecological Information

Toxicity Not available.

Mobility in soil Not available.

Bioaccumulative potential Not available.

# Section 13. Disposal Considerations

# Waste Disposal

Dispose of material according to all federal, state and local regulations.

Offer material to a licensed, professional waste disposal company to dispose of as unused product. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

## **Section 14. Transport Information**

DOT (US) Not dangerous goods.

IATA Not dangerous goods.

IMDG Not dangerous goods.

**Further Information** 

## Section 15. Regulatory Information

Reach No.

SARA 302 Components SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. 1,4-Dioxane CAS #: 123-91-1 Revision Date: 2007-07-01

SARA 311/312 Components Chronic health hazard.

Massachusetts Right 1,4-Dioxane CAS #: 123-91-1 Revision Date: 2007-07-01 **To Know Components** 

Pennsylvania Right | Isopropyl Thiogalactoside | CAS #: 367-93-1 | Revision Date: Know Components | 1,4-Dioxane | CAS #: 123-91-1 | Revision Date: 2007-07-01 To Know Components 1,4-Dioxane

CAS #: 367-93-1 New Jersey Right Isopropyl Thiogalactoside Revision Date: CAS #: 123-91-1 Revision Date: 2007-07-01 To Know Components 1,4-Dioxane

California Prop 65 WARNING! This product does not contain any chemicals known to the State of California to cause cancer. Components 1,4-Dioxane CAS #: 123-91-1 Revision Date: 2007-09-28

## Section 16. Other Information

Other information The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.

For emergencies in the USA, call CHEMTREC 800-424-9300