

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier Isopropyl b-D-thiogalactopyranoside - non-animal origin

Trade name: IPTG non-animal origin; IPTG

Product no.: NB-45-00030

CAS number: 367-93-1

EC number: 206-703-0

REACH No. A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.

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

Product use: Enzyme substrate or reagent

1.3 Details of the Supplier of the safety data sheet:

Company: **NEO BIOTECH**
Manufacturer/Distributor 74 Rue des Suisses, 92000 Nanterre
France
Tel: +33 9 77 40 09 09
E-mail: tech@neo-biotech.com

1.4 Emergency telephone number:

European (EU) emergency number: 112
American (USA) emergency number: 911
CHEMTREC emergency number: North America +1-800-424-9300 (toll free)
Asia emergency number: 110
Australia emergency number: 000
All numbers are available 24/7/365

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture according to CLP no. 1272/2008.

serious irritation (Category 2)
serious irritation (Category 2)
(single exposure), STOT SE3

2.2 Label elements CLP no. 1272/2008:

Hazard pictograms:



Signal word:
Warning

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Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statements:

Prevention:

P261 Avoid breathing mist/vapor.

P280 Wear protective gloves/eye protection.

Response:

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340 IF INHALED: Remove casualty to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Remove contact lenses, if possible.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501 Dispose of contents/ container in accordance with national regulations.

Additional labeling:

Caution! To the best of our knowledge the toxicological properties of this material have not been thoroughly investigated. Keep out of the reach of children.

2.3 Other Hazards.

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

CAS/EC-no.	REACH-no.	Name	Content %	Classification CLP
367-93-1	-	Isopropyl b-D-thiogalactopyranoside - non-animal origin C ₉ H ₁₈ O ₅ S	99-100	H315, Eye Irrit. 2; H319, STOT SE 3; H335.

3.2 Mixture:

See subsection 3.1

3.3 Additional information:

See full text of H-phrases in section 16. Occupational limits are listed in section 8, if these are available.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures:

General information: If any doubt or if symptoms persist, seek medical attention.

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Inhalation: Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

Skin contact: Wash immediately with plenty of water and soap for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothes before reuse. Call a physician.

Eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

Ingestion: Wash out mouth with water provided person is conscious. Call a physician.

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

Inhalation: Irritation may occur.

In case of eye contact: Irritating to eyes.

In case of skin contact: skin irritation may occur.

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

Treat symptomatically. If in contact with doctor, bring this safety data sheet with you.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media: foam, dry extinguishing powder, carbon dioxide (CO₂), water spray jet.

Unsuitable extinguishing media:
toxic fumes

5.2 Special hazards arising from the substance or mixture:

Do not inhale explosion and combustion gases. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

5.3 Advice for firefighters: Wear self-contained breathing apparatus and protective clothing to prevent contact.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Wear breathing apparatus if exposed to vapors/dusts/aerosols. Provide adequate ventilation.

6.2 Environmental precautions:

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Ensure all waste water is collected and treated via a waste water treatment plant.

6.3 Methods and material for containment and cleaning up:

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Then rinse the spillage site with plenty of water. Larger spills are to be absorbed with sand, earth or similar materials. Collected material is disposed of in accordance with section 13.

6.4 Reference to other sections:

See section 8 and 13 for further information.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid prolonged or repeated exposure. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities:

Store at -15°C.

7.3 Specific end use(s):

Warm to Room Temperature before use. Keep away from incompatible substances. Keep container tightly closed when not in use.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

This information is not available.

DNEL / PNEC:

-

8.2 Exposure controls

Appropriate engineering controls:

Airborne concentrations must be kept as low as possible. Provide sufficient ventilation.

Individual protection measures, such as personal protective equipment:

Smoking, consumption of food or liquid, and storage of tobacco, food or liquid, are not allowed in the workroom. Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed. Always wash hands, forearms and face.

Make sure that eyewash are clearly marked. Avoid contact with eyes and skin. Avoid breathing vapor.

Respiratory Protection

Wear NIOSH/MSHA or European Standard EN 149 approved respirators.

Hand Protection

Wear compatible chemical-resistant gloves to prevent skin exposure.

Eye Protection

Wear appropriate protective eyeglasses or chemical safety goggles. EN 166.

Body Protection

Wear compatible chemical-resistant gloves and clothing to prevent skin exposure.

Advice on Safe Handling

Wash contaminated clothing before reuse. Wear appropriate protective clothing to prevent exposure

Environmental exposure controls:

Avoid discharge to lakes, streams, sewers, etc.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Physical state: solid
Colour: white
Odour: odourless
Melting point/freezing point: 110 – 114 °C
Boiling point or initial boiling point and boiling range: not determined
Flammability this material is combustible, but will not ignite readily
Lower and upper explosion limit: not determined
Flash point: >110 °C
Auto-ignition temperature: not determined
Decomposition temperature: not relevant
pH (value) 5 – 7 (in aqueous solution: 50 g/l, 20 °C)
Kinematic viscosity: not relevant
Solubility(ies): water solubility (soluble)
Partition coefficient n-octanol/water (log value): -1,26 (Experimental data)
Vapour pressure: not determined
Density: not determined
Relative vapour density information on this property is not available

9.2 Other information:

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SECTION 10. STABILITY AND REACTIVITY

- 10.1 Reactivity:** The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.
- 10.2 Chemical stability:** The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
- 10.3 Possibility of hazardous reactions:** Strong oxidizers.
- 10.4 Conditions to avoid:** Keep away from heat.
- 10.5 Incompatible materials:** There is no additional information.
- 10.6 Hazardous decomposition products:** Hazardous combustion products: see section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

Classification acc. to GHS
This substance does not meet the criteria for classification.

Acute toxicity
Shall not be classified as acutely toxic.

Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin.

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Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

- If swallowed

Data are not available.

- If in eyes

Data are not available.

- If inhaled

Data are not available.

- If on skin

Data are not available.

- Other information

Health effects are not known. This information is based upon the present state of our knowledge.

11.2 Information on other hazards

Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0,1\%$.

Other information

There is no additional information.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity: Not classified. Shall not be classified as hazardous to the aquatic environment

12.2 Persistence and degradability: No data.

12.3 Bioaccumulative potential: No data.

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12.4 Mobility in soil: No data.

12.5 Result of PBT and vPvB assesment: No CPSR are created.

12.6 Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0,1\%$.

12.7 Other adverse effects: None known.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and Exhaust air.
Dispose of waste according to laws applicable.
Advice on Packaging
not.

Contaminated packing: Must be disposed of in accordance with local and national regulations.
The coding of a waste stream is based on the application of the product by the consumer.

SECTION 14. TRANSPORT INFORMATION

This product is not classified as dangerous to transport.

	ADR/RID	IMDG/IMO
14.1 UN number	-	-
14.2 UN proper shipping name	-	-
14.3 Transport hazard class(es)	-	-
14.4 Packing group	-	-
14.5 Environmental hazards - MP	No -	No -
Other information	LQ: - TUNNEL: -	LQ: - TUNNEL: -

14.6 Special precautions for user:
-

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
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SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Regulatory List

AREC, DSL, ECL, EINECS, IECSC, NZIOC, TCSI, TSCA

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Isopropyl b-D-thiogalactopyranoside - non-animal origin	-----	-----	-----

15.2 Chemical safety assessment:

Chemical safety assessments have not been performed for this product.

SECTION 16. OTHER INFORMATION

Full text of H-phrases as mentioned in section 3:

GHS07 Exclamation mark - Warning

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340 IF INHALED: Remove casualty to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Remove contact lenses, if possible.

Additional information:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Neo Biotech provides this MSDS in good faith. No representation is made as to the accuracy or comprehensiveness of the data and Neo Biotech shall not be liable for any errors in the data. No representation is made as to the fitness of the data or of the materials for any particular use. No representation or warranty is made as to damages or injury. User assumes all responsibility for compliance with all laws and regulations implicated by use of this material.

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