Safety data sheet



according to 1907/2006/EC, Article 31

Print date: 20.07.2017 Updated: 20.07.2017 Version 1

1. Identification of the substance/mixture and of the company/undertaking

• Product identifier

– Trade name: IPTG

- Article number: B325
- Hazardous components: *Isopropyl* β-D-1-thiogalactopyranoside (IPTG)
- CAS number: 367-93-1 (IPTG),
- EC number: 206-703-0 (IPTG),

- Relevant identified uses of the substance or mixture and uses advised against: *no data available*

- Application of the substance / the preparation: Laboratory chemicals
- Details of the supplier of the safety data sheet
 - Manufacturer/supplier:

Blirt S.A.

Trzy Lipy 3/1.38 80-172, Gdansk orders@blirt.eu

– Emergency telephone number: 112

2. Hazards identification

• Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008



Eye Irrit. 2 H319 Causes serious eye irritation



Carc. 2 H351 Suspected of causing cancer

Label elements

- Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms



- Signal word: Warning

– Hazard-determining components of labeling: *Isopropyl* β-D-1-*thiogalactopyranoside*

- Hazard statements:

H319 Causes serious eye irritation

H351 Suspected of causing cancer

- Precautionary statement(s):

Prevention:

P264: Wash hands thoroughly after handling.

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

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

Response:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P337+313: If eye irritation persists get medical advice/attention.

P308+313: If exposed: Call a POISON CENTER or doctor/physician.

Storage:

P405: Store locked up.

• Other hazards

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– Not applicable.

3. Composition/information on ingredients

- Chemical characterization: Substance

Dangerous ingredients	
CAS: 367-93-1 EINECS: 206-703-0	Isopropyl β-D-1-thiogalactopyranoside (IPTG)
	Eye Irrit. 2 H319; Carc. 2 H351

4. First aid measures

• Description of first aid measures

- After inhalation: Remove to fresh air ensuring one's own safety whilst doing so. Consult a doctor.

- After skin contact: Wash immediately with plenty of water with soap. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Remove all contaminated clothes immediately. If skin irritation continues, consult a doctor. - After eye contact: Rinse opened eye for several minutes under running water. Transfer to hospital for specialist examination. Call a doctor immediately.

- After swallowing: Rinse out mouth with water. Do not induce vomiting. If conscious, give half a liter of water to drink immediately. Seek medical treatment.

• Information for doctor

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

Skin contact

There may be irritation and redness at the site of contact.

Eye contact

There may be pain and redness. The eyes may water profusely. The vision may become blurred. May cause permanent damage.

Ingestion

There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation

There may me irritation of the throat with a feeling of tightness in the chest **Delayed/immediate effects**

Immediate effects can be expected after short-term exposure.

- Indication of any immediate medical attention and special treatment needed: Eye bathing equipment should be available on the premises. Not applicable.

5. Firefighting measures

• Extinguishing media

- Suitable extinguishing agents: water, CO₂, foam, powder. Use water spray to cool containers.

- Special hazards arising from the substance or mixture
 - Combustible
 - In case of fire, the following can be released: In combustion emits toxic fumes.
- Advise for firefighters
 - **Protective equipment:** Wear self-contained respiratory protective device. Wear protective clothing to prevent contact with skin and eyes.

• Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6. Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Avoid formation of dust, do not inhale dust, avoid substance contact, ensure adequate ventilation. Mark out the contaminated area with signs and prevent access to unauthorized personnel. Do not attempt to take action without suitable protective clothing.

- Environmental precautions: Do not allow to enter sewers/surface or ground water.

- Methods and material for containment and cleaning up: Pick up mechanically. Avoid generation of dusts. Clean up affected area. Dispose of material collected according to regulations. Ensure adequate ventilation. Transfer to closable. Labelled salvage container for disposal by an appropriate method.

7. Handling and storage

• Handling

- **Precautions for safe handing:** *Prevent formation or spread of dust. Any unavoidable deposit of dust must be regularly removed. Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance.*

• Conditions for safe storage, including any incompatibilities

- **Requirements to be met by storerooms and receptacles:** *Store in cool, well ventilated area. Avoid contact with water or humidity.*

- Information about storage in one common storage facility: Not required.

- Further information about storage conditions: Keep container tightly sealed. Open receptacle only under localized extractor facilities. Store under lock and key and with access restricted to technical experts or their assistants only.

- Recommended storage temperature: 4°C
- Storage class: 10-13
- Specific end use(s): No further relevant information available.

8. Exposure controls/personal protection

• Control parameters

- Ingredients with limit values that require monitoring at the workplace: *Not required.*

- Additional information: The lists valid during the making were used as basis.

• Exposure controls

- Ensure there is sufficient ventilation of the area.

- Personal protective equipment:

- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Vacuum clean contaminated clothing; do not blow or brush off contamination. Avoid contact with eyes and skin.
- **Respiratory protection:** In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-

contained respiratory protective device. Filter P2.Self-contained breathing apparatus must be available in case of emergency.

• Protection of hands:

<u>*Protective gloves*</u> – the glove material has to be impermeable and resistant to the product/the substance/the preparation.

- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation:

- **Material of gloves:** the selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material:** The exact break through time has to be observed.
- For the permanent contact gloves made of the following materials are suitable: Nitrile rubber, NBR. Recommended thickness of the material ≥0,11 mm. Value for the permeation: Level ≥480 min.
- **Eye protection:** Safety glasses.Tightly fitting safety goggles. Ensure eye bath is to hand.
- **Body protection:** Protective work clothing. Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

9. Physical and chemical properties

- Information on basic physical and chemical properties
 - Appearance:
 - Form: Powder
 - Colour: White
 - Melting point: 120-122 [°C]

- Other information: No further relevant information available

10. Stability and reactivity

- Reactivity: Stable under recommended transport or storage conditions.
- Chemical stability: Stable under normal conditions.
- Thermal decomposition/conditions to be avoided: moisture

– **Possibility of hazardous reaction:** *Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.*

- Conditions to avoid: Heat
- Incompatible materials: Strong acids. Strong oxidising agents
- Hazardous decomposition product: See chapter 5

11. Toxicological information

• Information on toxicological effects

- Primary irritant effect:

Skin contact

There may be irritation and redness at the site of contact.

Eye contact

There may be pain and redness. The eyes may water profusely. The vision may become blurred. May cause permanent damage.

Ingestion

There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting

Inhalation

There may me irritation of the throat with a feeling of tightness in the chest **Delayed/immediate effects**

Immediate effects can be expected after short-term exposure.

- Sensitization: no sensitizing effects known

- Other information (about experimental toxicology): no data available

12. Ecological information

- Toxicity: no data available
- Persistence and degradability: Biodegradable
- Bioaccumulative potential: no bioaccumulation potential
- Mobility in soil: Readily absorbed into soil. No data available.
- Results of PBT and vPvB: This substance is not identified as a PBT substance.
- Other adverse effects: Negligible ecotoxity
- General notes: not applicable

13. Disposal considerations

• Waste treatment methods

- **Recommendation:** Chemicals must be disposed of in compliance with the respective national regulations. Must not be disposed together with household garbage. Do not allow product to reach sewage system. Transfer to a suitable container and arrange collection by specialized disposal company.

- Uncleaned packaging (Recommendation): Disposal must be made according to official regulations. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14. Transport information

- UN-Number:
 - ADR, ADN, IMDG, IATA: not dangerous goods/not applicable
- UN proper shipping name:
 - ADR, ADN, IMDG, IATA: not dangerous goods/not applicable
- Transport hazard class(es):
 - ADR, ADN, IMDG, IATA: not dangerous goods/not applicable
 - Clasa: not dangerous goods/not applicable

- Packing group:

- ADR, IMDG, IATA: not dangerous goods/not applicable
- Environmental hazards:
 - Marine pollutant: No
- Special precautions for users: not applicable

- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: *not applicable*

– Transport/additional information: *not dangerous according to the above specifications.*

- UN "Model Regulation": not dangerous goods/not applicable

15. Regulatory information

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out for the substance.

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.