

**Safety data sheet**  
**according to UK REACH (SI 2020/1577) as amended**

Printing date 14.03.2025

Version number 3 (replaces version 2)

Revision: 14.03.2025

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

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- **1.1 Product identifier**
- **Trade name:** IPTG (Dioxane free)
- **Product Code:** 30-34-01
- **EC number:**  
206-703-0
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Product category** PC21 Laboratory chemicals
- **Application of the substance / the mixture** Laboratory chemicals
- **Uses advised against** Any use not specified above.
- **1.3 Details of the supplier of the safety data sheet**
- **Supplier:**  
Severn Biotech Ltd.  
Unit 2,  
Park Lane,  
Kidderminster,  
Worcestershire.  
DY11 6TJ  
UK  
Tel: 0044 1562 825286  
Fax: 0044 1562 825284  
email: info@severnbiotech.com
- **Further information obtainable from:** Product safety department.
- **1.4 Emergency telephone number:**  
Members of the public seeking specific information on poisons should contact:  
In England and Wales: NHS 111 - dial 111  
In Scotland: NHS 24 - dial 111

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\* **SECTION 2: Hazards identification**

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- **2.1 Classification of the substance or mixture**
- **Classification according to GB-CLP**  
Acute Tox. 4 H302 Harmful if swallowed.  
Acute Tox. 4 H312 Harmful in contact with skin.  
Acute Tox. 4 H332 Harmful if inhaled.
- **2.2 Label elements**
- **Labelling according to GB-CLP** The substance is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**  
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
- **Precautionary statements**  
P261 Avoid breathing dust.  
P280 Wear protective gloves / protective clothing.  
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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P330 Rinse mouth.

P362+P364 Take off contaminated clothing and wash it before reuse.

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

**2.3 Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

**3.1 Substances****CAS No. Description**

isopropyl-β-D-thiogalactopyranoside

**Identification number(s)****EC number:** 206-703-0

### \* SECTION 4: First aid measures

**4.1 Description of first aid measures****General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

**After eye contact:**

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

**After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

**Information for doctor:** Treat symptomatically and supportively.**4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.**4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### \* SECTION 5: Firefighting measures

**5.1 Extinguishing media****Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

**For safety reasons unsuitable extinguishing agents:** Water with full jet**5.2 Special hazards arising from the substance or mixture**

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

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In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Sulphur Oxides (SO<sub>x</sub>)

· **5.3 Advice for firefighters**

· **Protective equipment:**

Do not inhale explosion gases or combustion gases.

Wear fully protective suit.

Wear self-contained respiratory protective device.

· **Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.

### SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Avoid formation of dust.

Ensure adequate ventilation

Keep ignition sources away - no smoking.

· **6.2 Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

· **6.3 Methods and material for containment and cleaning up:**

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

Ensure adequate ventilation.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.

· **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.

· **Information about storage in one common storage facility:**

Store away from oxidising agents.

Store away from foodstuffs.

· **Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· **Storage class:** 13

· **7.3 Specific end use(s)** No further relevant information available.

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#### \* SECTION 8: Exposure controls/personal protection

- **8.1 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.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**  
The usual precautionary measures are to be adhered to when handling chemicals.  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.  
Do not breathe dust  
Do not eat, drink, smoke or sniff while working.  
A safe system of work must be formulated and followed to ensure safe working with this product. Relevant workers must receive suitable and sufficient training and supervision.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Hand protection**



Protective gloves.

Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

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 the 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 found out by the manufacturer of the protective gloves and has to be observed.
- **Eye/face protection**



Safety glasses with side-shields conforming to EN166.

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

- **Body protection:**



Protective work clothing

- **Environmental exposure controls** Do not allow to enter drains, sewers or watercourses.
- **Risk management measures** The operators shall be instructed adequately.

#### \* SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Solid

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· <b>Colour:</b>	White
· <b>Odour:</b>	Sulfurous
· <b>Odour threshold:</b>	Not determined.
· <b>Melting point/freezing point:</b>	112 °C
· <b>Boiling point or initial boiling point and boiling range</b>	Undetermined.
· <b>Flammability</b>	Product is not flammable.
· <b>Lower and upper explosion limit</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Flash point:</b>	Not applicable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>pH</b>	Not applicable.
· <b>Viscosity:</b>	
· <b>Kinematic viscosity</b>	Not applicable.
· <b>Dynamic:</b>	Not applicable.
· <b>Solubility</b>	
· <b>water:</b>	Not determined.
· <b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
· <b>Vapour pressure:</b>	Not applicable.
· <b>Density and/or relative density</b>	
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not applicable.
· <b>9.2 Other information</b>	
· <b>Appearance:</b>	
· <b>Form:</b>	Crystalline
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Ignition temperature:</b>	Not determined.
· <b>Explosive properties:</b>	Product is not explosive. However, formation of explosive air/dust mixtures are possible.
· <b>Molecular weight</b>	238.3 g/mol
· <b>Change in condition</b>	
· <b>Evaporation rate</b>	Not applicable.
· <b>Information with regard to physical hazard classes</b>	
· <b>Explosives</b>	Void
· <b>Flammable gases</b>	Void
· <b>Aerosols</b>	Void
· <b>Oxidising gases</b>	Void
· <b>Gases under pressure</b>	Void
· <b>Flammable liquids</b>	Void
· <b>Flammable solids</b>	Void
· <b>Self-reactive substances and mixtures</b>	Void
· <b>Pyrophoric liquids</b>	Void
· <b>Pyrophoric solids</b>	Void
· <b>Self-heating substances and mixtures</b>	Void
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
· <b>Oxidising liquids</b>	Void
· <b>Oxidising solids</b>	Void
· <b>Organic peroxides</b>	Void

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|----------------------------------|------|
| · <b>Corrosive to metals</b>     | Void |
| · <b>Desensitised explosives</b> | Void |

#### \* SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
There is a risk of a dust explosion if the following conditions are met:
  - The substance is given in very finely distributed form (powder, dust).
  - The substance is whirled up in sufficient quantity in the air.
  - An ignition source is present (flame, spark, electrostatic discharge, etc.)
- **10.3 Possibility of hazardous reactions** Reacts violently with oxidising agents.
- **10.4 Conditions to avoid**  
Heat and static discharge.  
No further relevant information available.
- **10.5 Incompatible materials:** Strong oxidising agents.
- **10.6 Hazardous decomposition products:**  
Carbon monoxide and carbon dioxide  
Sulphur oxides (SO<sub>x</sub>)

#### \* SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity**  
Harmful if swallowed, in contact with skin or if inhaled.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Subacute to chronic toxicity:** Prolonged or repeated skin contact may irritate and cause dermatitis.
- **11.2 Information on other hazards**
- **Endocrine disrupting properties** Substance is not listed.

#### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** biodegradable
- **12.3 Bioaccumulative potential** Product is not expected to bioaccumulate.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**  
 Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water  
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### \* SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
 Recommended Hierarchy of Controls:
  - Minimise waste;
  - Reuse if not contaminated;
  - Recycle, if possible; or
  - Safe disposal (if all else fails).
 Must not be disposed together with household garbage. Do not allow product to reach sewage system.  
 Contact waste processors for recycling information.  
 Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.
- **Uncleaned packaging:**
- **Recommendation:**  
 Packagings that may not be cleansed are to be disposed of in the same manner as the product.  
 Disposal must be made according to official regulations.

### SECTION 14: Transport information

- |   |  |
|---|--|
| · <b>14.1 UN number or ID number</b><br>· <b>ADR/RID/ADN, ADN, IMDG, IATA</b>                       | Not applicable                                       |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR/RID/ADN, ADN, IMDG, IATA</b>                      | Not applicable                                       |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR/RID/ADN, ADN, IMDG, IATA</b><br>· <b>Class</b> | Not applicable                                       |
| · <b>14.4 Packing group</b><br>· <b>ADR/RID/ADN, IMDG, IATA</b>                                     | Not applicable                                       |
| · <b>14.5 Environmental hazards:</b><br>· <b>Marine pollutant:</b>                                  | No   |
| · <b>14.6 Special precautions for user</b>  | Not applicable.                                      |
| · <b>14.7 Maritime transport in bulk according to IMO instruments</b>                               | Not applicable.                                      |
| · <b>Transport/Additional information:</b>  | Not dangerous according to the above specifications. |

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· <b>UN "Model Regulation":</b>	Not applicable
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### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Poisons Act**
- **Regulated explosives precursors** Substance is not listed.
- **Regulated poisons** Substance is not listed.
- **Reportable explosives precursors** Substance is not listed.
- **Reportable poisons** Substance is not listed.
- **Control Of Major Accident Hazards Regulations 2015 (COMAH)**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 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.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

- **Training hints**

This product should only be handled by workers who have received sufficient training in the safe handling and use of chemical products.

- **Department issuing SDS:** Product safety department.

- **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

- **\* Data compared to the previous version altered.**