Material Safety Data Sheet

Section 1: Product and Company Identification			
Product Name	Isopropyl β-D-1-thiogalactopyranoside; IPTG		
Catalogue Number:	ASC-1017	**CAS Number:**	367-93-1
E-mail:	Sales@ausamics.com	**Website**:	Ausamics.com

Section 2: Hazards Identification	
Classification of the substance or mixture Carcinogenicity, (Category 1B) H350: May cause cancer.	
Label elements **Labelling according Regulation (EC) No 1272/2008**	
Pictogram	
Signal Word	Danger
Hazard Statements H350 May cause cancer.	
Precautionary Statements P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. 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.	
Supplemental Hazard Statements	None Restricted to professional users.
Other hazards This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.	

Section 3: Composition / Information on Ingredients	
Mixture	
Formula	C9H18O5S
Molecular weight	238,3 g/mol

CAS-No.		367-93-1	
EC-No.		206-703-0	
Component		**Classification**	**Concentration**
1,4-Dioxane Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	123-91-1	Flam. Liq. 2; Eye Irrit. 2; Carc. 1B; STOT SE 3; H225, H319, H350, H335 Concentration limits: >= 20 %: STOT SE 3, H335;	>= 0,1 - < 1 %
EC-No.	204-661-8		
Index-No.	603-024-00-5		

Section 4: First Aid Measures

Description of first-aid measures	
General advice	Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air. Call in physician.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.
In case of eye contact	After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.
If swallowed	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.	
Indication of any immediate medical attention and special treatment needed No data available	

Section 5: Fire Fighting Measures

Extinguishing media
Suitable extinguishing media
Water Foam Carbon dioxide (CO2) Dry powder.
Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture
Carbon oxides
Sulfur oxides
Combustible.
Development of hazardous combustion gases or vapors possible in the event of fire.

Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information
Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6: Accidental Release Measures
Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Environmental precautions Do not let product enter drains.
Methods and materials for containment and cleaning up Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.
Reference to other sections For disposal see section 13.

Section 7: Handling and Storage	
Precautions for safe handling Work under hood. Do not inhale substance/mixture.	
Hygiene measures Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.	
Conditions for safe storage, including any incompatibilities	
Storage conditions	Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.
Storage stability	storage temperature 2 - 8 °C hygroscopic
Storage class	Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects.

Section 8: Exposure Controls / Personal Protection
Control parameters **Ingredients with workplace control parameters**
Exposure controls **Personal protective equipment**
Eye/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses.
Skin protection Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested: KCL 741 Dermatril® L Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested: KCL 741 Dermatril® L
Body Protection protective clothing
Respiratory protection required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P3 The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
Control of environmental exposure Do not let product enter drains.

Section 9: Physical and Chemical Properties	
Physical state	solid
Color	No data available
Odor	No data available
Melting point/freezing point	Melting point/range: 105 °C
Initial boiling point and boiling range	No data available
Evaporation rate	
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	Not applicable
Vapor pressure	No data available
Vapor density	
Autoignition temperature	No data available
Decomposition temperature	No data available
pH	5 - 7 at 50 g/l
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Water solubility	soluble
Partition coefficient: n-octanol/water	No data available
Density	No data available
Relative density	No data available
Relative vapor density	No data available
Explosive properties	Not classified as explosive.
Oxidizing properties	none
Other safety information	No data available

Section 10: Stability and Reactivity
Reactivity The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
Chemical stability The product is chemically stable under standard ambient conditions (room temperature).
Possibility of hazardous reactions Violent reactions possible with: Strong oxidizing agents
Conditions to avoid Exposure to moisture. no information available
Incompatible materials No data available
Hazardous decomposition products In the event of fire: see section 5.

Section 11: Toxicological Information	
Information on toxicological effects	
Mixture	
Acute toxicity	Oral: No data available Inhalation: No data available Dermal: No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	Remarks: The value / statement given is based on a (Q)SAR approach.
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional Information **Endocrine disrupting properties** **Product:** Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.	

Section 12: Ecological Information	
Toxicity	No data available
Persistence and degradability	No data available
Bio accumulative potential	No data available
Mobility in soil	No data available

Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Endocrine disrupting properties **Product:** Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other adverse effects	No data available

Section 13: Disposal Consideration

Waste treatment methods
Product
Offer surplus and non- recyclable solutions to a licensed company. Contact a licensed professional waste disposal service to dispose of this material

Contaminated packaging
Dispose of as unused product.

Section 14: Transport Information

UN number	ADR/RID: - IMDG: - IATA: -
UN proper shipping name	ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods
Transport hazard class(es)	ADR/RID: - IMDG: - IATA: -
Packaging group	ADR/RID: - IMDG: - IATA: -
Environmental hazards	ADR/RID: no IMDG Marine pollutant: no IATA: no

Special precautions for user
No data available
Further information
Not classified as dangerous in the meaning of transport regulations.

Section 15: Regulatory Information

Safety, health, and environmental regulations/legislation specific for the substance or mixture
This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Authorizations and/or restrictions on use

REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59).	1,4-Dioxane
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures, and articles (Annex XVII)	1,4-Dioxane

Other regulations
Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.
Take note of Dir 94/33/EC on the protection of young people at work.

Chemical Safety Assessment
For this product a chemical safety assessment was not carried out

Section 16: Additional Notes	
Documented By	Ausamics Life Science Sales@Ausamics.com
Revision date	May 29, 2024
Summary of Revisions	This document has been revised to meet the requirements of the US OSHA HazCom 2012 Standard, which supersedes the existing regulations outlined in 29 CFR 1910.1200, in order to align with the internationally recognized globally Harmonized System of Classification and Labeling of chemicals (GHS).
Disclaimer	The information presented in this Safety Data sheet is accurate to the best of our knowledge, information, and belief at the time of publication. It is intended as a guide for the safe handling, use, processing, storage, transportation, disposal, and release of specific materials. However, it should be interpreted as a warranty or quality specification. The provided information pertains solely to the designated material and may not be applicable to its use in combination with other materials or in any process, unless explicitly stated in the text.