



Celltechgen

For Research Only

SAFETY DATE SHEET

Luminol/Enhancer Solutions

CTG-AB0001-A	The Celltechgen™ IPTG (Isopropyl β-D-1-thiogalactopyranoside), 1g	ISSUE DATE July 9, 2019
CTG-AB0001-B	The Celltechgen™ IPTG (Isopropyl β-D-1-thiogalactopyranoside), 10g	ISSUE DATE July 9, 2019

Section 1. Identification

GHS product identifier : IPTG, Dioxane-Free, High Purity

Product code : CTG-AB0001

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

Identified uses Reagent for development and research. For additional information on uses please refer to "www.celltechgen.com"

Supplier's details

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Section 2. Hazards identification.

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Other hazards

None known.

Section 3. Composition/information on ingredients

Substance

Formula	C ₉ H ₁₈ O ₅ S (Hill)
EC-No.	206-703-0
Molar mass	238,3 g/mol
Remarks	No disclosure requirement according to Regulation (EC) No. 1907/2006.

Section 4. First aid measures

Description of first aid measures

After inhalation: fresh air.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

After eye contact: rinse out with plenty of water. Remove contact lenses.

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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

Combustible.

Vapours are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

Fire may cause evolution of:

Sulphur oxides

Advice for firefighters

Special protective equipment for firefighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Suppress (knock down) gases/vapours/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 inhalation of dusts.

Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment 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 dry.

Dispose of properly. Clean up affected area. Avoid generation of dusts.

Section 7. Handling and storage

Precautions for safe handling

Advice on safe handling

Observe label precautions.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

Conditions for safe storage, including any incompatibilities

Storage conditions

Protected from light.

Tightly closed.

Dry.

Recommended storage temperature see product label.

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

Section 8. Exposure controls/personal protection

Exposure control

Engineering measure

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7.1

Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection: Safety glasses

Hand protection:full contact Glove material: Nitrile rubber
Glove thickness: 0,11 mm
Break through time: > 480 min

Hand protection:splash contact Glove material: Nitrile rubber
Glove thickness: 0,11 mm
Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact). This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves.

Respiratory protection

Required when dusts are generated. Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances. The entrepreneur 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.

Environmental exposure controls

Do not let product enter drains

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Form	solid
Colour	white
Odour	odourless
Odour Threshold	Not applicable
pH	No information available.

Melting point	109 - 111 °C
Boiling point	No information available.
Flash point	> 110 °C
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapour pressure	No information available.
Relative vapour density	No information available.
Density	No information available.
Relative density	No information available.
Water solubility	10 g/l ,at 20 °C
Partition coefficient: n-octanol/water	log Pow: -1,26 (experimental) (Lit.) Bioaccumulation is not expected.
Auto-ignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	No information available.
Oxidizing properties	none

Section 10. Stability and reactivity

Reactivity

Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical. 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

Sensitivity to light

Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

Conditions to avoid

Strong heating.

Incompatible materials

no information available

Hazardous decomposition products

in the event of fire: See section 5.

Section 11. Toxicological information

Information on toxicological effects

Acute oral toxicity This information is not available.

Acute inhalation toxicity This information is not available.

Acute dermal toxicity This information is not available.

Skin irritation	This information is not available.
Eye irritation	This information is not available.
Sensitisation	Sensitisation possible in predisposed persons.
Germ cell mutagenicity	This information is not available.
Carcinogenicity	This information is not available.
Reproductive toxicity	This information is not available.
Teratogenicity	This information is not available.
Specific target organ toxicity - single exposure	This information is not available.
Specific target organ toxicity - repeated exposure	This information is not available.
Aspiration hazard	This information is not available.

Section 12. Ecological information

Toxicity

No information available

Persistence and degradability

No information available

Bioaccumulative potential

Partition coefficient: n-octanol/water

log Pow: -1,26

(experimental)

Mobility in soil

No information available.

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other adverse effects

Discharge into the environment must be avoided.

Section 13. Disposal considerations

Please follow the regulations of different countries

Section 14. Transport information

Land transport (ADR/RID) 14.1 - 14.6	Not classified as dangerous in the meaning of transport regulations.
Inland waterway transport (ADN)	Not relevant
Air transport (IATA) 14.1 - 14.6	Not classified as dangerous in the meaning of transport regulations.
Sea transport (IMDG) 14.1 - 14.6	Not classified as dangerous in the meaning of transport regulations.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	
Not relevant	

Section 15. Regulatory information

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

EU regulations

Major Accident Hazard	SEVESO III
Legislation	Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer
Regulation (EC) No 850/2004 of the European Parliament and of the Council
of 29 April 2004 on persistent organic pollutants and amending Directive
79/117/EEC
Substances of very high concern (SVHC)

Not regulated

Not regulated

This product does not contain
substances of very high concern
according to Regulation (EC)
No1907/2006(REACH), Article 57
above the respective regulatory
concentration limit of $\geq 0.1 \text{ \% (w/w)}$.
10-13

National legislation Storage class

Chemical safety assessment

For this product a chemical safety assessment was not carried out.

Section 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.celltechgen.com.

Regional representation

This information is given on the authorised Safety Data Sheet for your country.

End of the safety data sheets