

X-GAL

XGAL001 – XGAL010

SECTION 1 Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Identification of the product	: Substance
Product code	: XGAL001, XGAL005, XGAL010
Trade name	: X-GAL
Synonyms	: 5-bromo-4-chloro-3-indolyl – β -D-galactopyranoside (2S,3R,4S,5R,6R)-2-[(5-bromo-4-chloro-1H-indol-3-yl)oxy]-6-(hydroxymethyl)oxane-3,4,5-triol
CAS number	: 7240-90-6
EC No:	: 230-640-8
Molecular Weight	: 408.63 g/mol

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

1.2.1 Relevant identified uses	: For research purposes only
1.2.2 Uses advised against	No additional information available

1.3. Details of the supplier of the safety data sheet

Company identification

: Formedium Ltd.
King's Lynn, England, PE31 6DJ
Tel: +44(0)1485 609069
Web: www.formedium.com
E-mail: info@formedium.com

1.4. Emergency telephone number

Emergency Telephone Number:

Tel: +44(0)7734 919789 (local time : 9.00 to 17.00)
NHS Direct 111 (UK, 24 hours), 112 (EU, 24 Hours)

SECTION 2 Hazards identification**2.1 Classification of the substance or mixture**

Not a dangerous substance according to GHS.

Classification according to Regulation (EC) No 1272/2008

Not regulated

2.2 Label elements**Labelling according to Regulation (EC) No. 1272/2008**

Hazards pictograms code	: None
Precautionary statements	: None

2.3. Other hazards

None under normal conditions.

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SECTION 3 Composition/information on ingredients

Components : This product is not classified as hazardous.

Substance name:	Contents	CAS No:	EC No:
5-bromo-4-chloro-3-Indolyl- β -D-galactoside	99%	7240-90-6	230-640-8

SECTION 4 First aid measures

4.1. Description of first aid measures

- Inhalation** : Remove victim to fresh air. If not breathing give artificial respiration.
- Skin contact** : Wash with soap and plenty of water. Wash contaminated clothing before reuse.
- Eye contact** : : Flush eyes with water and copious amounts of water for at least 15 minutes.
- Ingestion** : Rinse mouth with water.
Never give anything by mouth to an unconscious person.

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

Symptoms and effects, both acute and delayed. : No data available.

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

Medical attention and special treatment needed. : No data available.

SECTION 5 Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray, alcohol-resistant foam, dry chemical or Carbon Dioxide.

5.2. Special hazards arising from the substance or mixture

Special exposure hazard : Emits toxic fumes under fire conditions.

5.3. Advice for firefighters

Special protective equipment for fire-fighters : Wear self contained breathing apparatus for fire fighting if necessary.

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SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid dust formation. Avoid breathing vapours, mist or gas.

6.2. Environmental precautions

Environmental precautions : Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

Clean up methods : Sweep up and shovel. Keep in suitable closed containers for disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Avoid inhalation. Avoid contact with eyes, skin and clothing. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well ventilated area, protected from light.
Recommended storage temperature: $\geq + 4^{\circ}\text{C}$.

7.3. Specific end use(s)

Specific end use(s) : For research purposes only

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Exposure limit values : No additional information available.

8.2. Personal Protective Equipment

- **Eye protection** : Safety glasses. Approved and tested under appropriate government standards such as NIOSH (US) or EN 166 (EU).
- **Skin and body protection** : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.
- **Hand protection** : Handle with gloves. Gloves Use proper glove removal techniques (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
- **Respiratory protection** : Respiratory protection is not required. Where protection from nuisance levels of dust are desired use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- **Hygiene measures** : General industrial hygiene practice.

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SECTION 9 Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Form	: Powder
Colour	: White
Odour	: No data available.
Odour threshold	: No data available.
pH	: No data available.
Melting point	: 230 °C
Boiling point	: No data available.
Flash point	: No data available.
Solubility in water	: No data available.
Relative Density	: No data available
Vapour density	: No data available.
Vapour pressure	: No data available
Partition coefficient: n-octanol / water	: log Pow : not determined
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available.
Ignition temperature	: No data available.
Decomposition temperature	: No data available
Oxidising properties	: O and Cl atoms are bonded only to C and H atoms in the structure, so X-GAL should not have oxidizing properties according to the "Guidance on the application of regulation (EC) No 1272/2008" present on the ECHA web site.
Explosive properties	: X-GAL does not have chemical explosive properties according to the description of explosive groups made in the "Guidance on the application of regulation (EC) No 1272/2008" present on the ECHA web site.
Upper / Lower flammability or explosive limits	: No data available.
Lower explosion limit	: No data available.
Upper explosion limit	: No data available.
Viscosity	: No data available.

9.2. Other information

No additional information available

X-GAL**XGAL001 – XGAL010****SECTION 10 Stability and reactivity****10.1. Chemical stability**

Heat, light and moisture sensitive. Stable under recommended storage conditions.

10.2. Conditions to avoid

Stable under normal conditions.

10.3. Materials to avoid

Strong oxidizing agents.

10.4. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas, Hydrogen bromide gas.

SECTION 11 Toxicological information**11.1. Information on toxicological effects**

Acute toxicity	: No data available
Skin corrosion / irritation	: No data available
Serious eye damage / eye irritation	: No data available
Respiratory or skin sensitisation	: No data available
Germ cell mutagenicity	: No data available
Carcinogenicity	: IARC : No component of this product present at levels greater than or equal to 0.1% is identified as probable possible or confirmed as a human carcinogen by IARC.
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
Potential health effects	
Inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	: May be harmful if swallowed.
Skin	: May be harmful if absorbed through skin. May cause skin irritation.
Eyes	: May cause eye irritation.

To the best of our knowledge, the chemical, physical and toxicological properties have not been fully investigated.

Additional information : RTECS: Not available.

11.2. Additional Information

Endocrine disrupting properties :

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.

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SECTION 12 Ecological information**12.1. Toxicity**

No data available.

12.2. Persistence and degradability

No additional information available.

12.3. Bioaccumulative potential

No additional information available.

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

12.7. Endocrine disrupting properties

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 13 Disposal considerations**13.1. Waste treatment methods**

Product: Contact a licenced waste disposal service to dispose of this material. Disposal should be made in accordance with existing disposal practices employed for infectious waste at your institution. Observe all federal, state and local environmental regulations.

Contaminated packaging: Dispose of as unused product.

SECTION 14 Transport information**UN Number** Not applicable **General information**

: Not classified as dangerous in the meaning of transport regulations.

14.1. UN Proper shipping name

Not applicable.

14.2. Transport Hazard Class(es)

Not applicable.

14.3. Packing group

Not applicable.

14.4. Environmental hazards

Not applicable.

14.5. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

X-GAL**XGAL01 – XGAL010****SECTION 15 Regulatory information****15.1.Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EU) No. 2015/830.

15.2.Chemical Safety Assessment

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

SECTION 16 Other information**Further information**

: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Formedium Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.

Revision

: Complete SDS revision

End of document