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

- · Product identifier
- Trade name: X-gal
- · Article number: 30-37-01
- · CAS Number:
- 7240-90-6
- · EC number:
- 230-640-8
- · Registration number

A registration number is not available for this substance because the annual tonnage is less than that required for registration or the registration date is envisaged for a later registration deadline.

- \cdot Relevant identified uses of the substance or mixture and uses advised against
- No further relevant information available.
- \cdot Application of the substance / the preparation Laboratory chemical
- · Details of the supplier of the safety data sheet
- · Manufacturer/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.
- Emergency telephone number: Tel: 0044 1562 825286 (not 24 hours)

2 Hazards identification

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

<u>Classification according to Directive 67/548/EEC or Directive 1999/45/EC</u>

Xn; Harmful

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

• Information concerning particular hazards for human and environment: Not applicable.

· Label elements

- · Labelling according to Regulation (EC) No 1272/2008
- The substance is classified and labelled according to the 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
- P260 Do not breathe dust.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P270 Do no eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

· Other hazards

· Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- · **vPvB:** Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- \cdot CAS No. Description
- 7240-90-6 5-bromo-4-chloroindol-3-yl-B-D-galactopyranoside
- · Identification number(s)
- · EC number: 230-640-8

4 First aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

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.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:
- Rinse out mouth and then drink plenty of water.
- Do not induce vomiting; call for medical help immediately.
- Information for doctor: Treat symptomatically and supportively.
- · Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · Special hazards arising from the substance or mixture
- During heating or in case of fire poisonous gases are produced. In case of fire, the following can be released:
- Hydrogen chloride (HCl)
- Hydrogen bromide • Advice for firefighters
- Protective equipment:
- Do not inhale explosion gases or combustion gases.

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Wear fully protective suit.

Wear self-contained respiratory protective device.

6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures Avoid formation of dust.

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

- · Environmental precautions:
- Do not allow product to reach sewage system or any water course.
- Do not allow to penetrate the ground/soil.
- **Methods and material for containment and cleaning up:** Ensure adequate ventilation. Pick up mechanically.
- Send for recovery or disposal in suitable receptacles.
- · 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.

7 Handling and storage

· Handling:

· Precautions for safe handling

Prevent formation of dust.

Avoid direct contact (skin contact, ingestion and/or inhalation of fume/mist/dust) with the product. Safety showers and eye wash facilities should be available at the work area.

- Ensure good ventilation/exhaustion at the workplace.
- · Information about fire and explosion protection: No special measures required.
- · 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 oxidizing agents. Store away from foodstuffs.
- · Further information about storage conditions:
- Keep container tightly sealed.
- Store in cool, dry conditions in well sealed receptacles.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- · 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
- · Personal protective equipment:
- Select PPE appropriate for the operations taking place taking into account the product properties.
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed.

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Wash hands before breaks and at the end of work.

- Avoid contact with the eyes and skin.
- Do not breath dust
- Do not eat, drink, smoke or sniff while working.
- Storing food in the working area is prohibited.
- Ensure that eyewash stations and safety showers are close to the workstation location.

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.

· Protection of hands:



Protective gloves

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 protection: Safety glasses
- · Body protection: Protective work clothing

· Information on basic physical and chemical properties				
General Information				
Appearance: Form:	Powder			
rorm: Colour:	White			
Odour:	Mild			
Odour threshold:	Not determined.			
pH-value:	Not applicable.			
Change in condition				
Melting point/Melting range:	230 °C			
Boiling point/Boiling range:	Undetermined.			
Flash point:	Not applicable.			
Flammability (solid, gaseous):	Product is not flammable.			
Ignition temperature:				
Decomposition temperature:	Not determined.			
Self-igniting:	Not determined.			
Danger of explosion:	Product does not present an explosion hazard.			
Explosion limits:				
Lower:	Not determined.			
Upper:	Not determined.			

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· Vapour pressure:	Not applicable.	
· Density:	Not determined.	
· Relative density	Not determined.	
· Vapour density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with	h	
water:	Not determined.	
· Partition coefficient (n-octan	ol/water): Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Other information	No further relevant information available.	

10 Stability and reactivity

· Reactivity

- · Chemical stability
- · Thermal decomposition / conditions to be avoided:
- No decomposition if used and stored according to specifications.
- \cdot Possibility of hazardous reactions No dangerous reactions known.
- \cdot Conditions to avoid No further relevant information available.
- · Incompatible materials: Strong acids and oxidising agents
- · Hazardous decomposition products:
- Hydrogen chloride (HCl)
- Hydrogen bromide

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- \cdot Sensitization: No sensitizing effects known.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- Persistence and degradability biodegradable
- · Behaviour in environmental systems:
- · Bioaccumulative potential Product is not expected to bioaccumulate.
- Mobility in soil No further relevant information available.
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

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13 Disposal considerations

\cdot Waste treatment methods

 $\cdot \ Recommendation$

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.

· European waste catalogue

Waste key numbers in accordance with the European Waste catalogue (EWC) are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

· Uncleaned packaging:

• **Recommendation:** Disposal must be made according to official regulations.

4 Transport information	
· UN-Number · ADR, ADN, IMDG, IATA	Void
· UN proper shipping name · ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· ADR, ADN, IMDG, IATA · Class	Void
· Packing group · ADR, IMDG, IATA	Void
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	-

15 Regulatory information

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.