



1121 5th Street NW
Washington, DC 20001
www.edvotek.com

Safety Data Sheet

Version 2
Revision Date 05/14/2025

PRODUCT AND COMPANY IDENTIFICATION

Product name: X-Gal Solution	Telephone: 1-800-338-6835
Product Number: 614	or 202-370-1500
Brand: Edvotek	Fax: 202-370-1501
Supplier: Edvotek	Emergency Phone #: 202-370-1500
1121 5 th Street NW	
Washington, DC 20001	

HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards:

No known OSHA hazards.

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

HMIS Classification:

Health hazard: 0

Flammability: 0

Physical hazard: 0

NFPA Rating:

Health hazard: 0

Fire: 0

Reactivity Hazard: 0

Potential Health Effects:

Inhalation: May be harmful if inhaled.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Ingestion: May be harmful if swallowed.

COMPOSITION/INFORMATION ON INGREDIENTS

Synonym: 5-Bromo-4-chloro-3-indolyl β -D-galactopyranoside, X-Gal, BCIG

Formula : $C_{14}H_{15}BrClNO_6$

Molecular Weight : 408.63 g/mol

Chemical name	EC No.	CAS -No	Concentration
X-Gal	230-640-8	• 7240-90-6	< 50 mg/ml

No ingredients are hazardous according to OSHA criteria.

FIRST AID MEASURES**General information**

No special measures required.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult doctor in case of complaints.

In case of skin contact

Immediately wash off with soap and plenty of water. Get medical attention if symptoms develop.

In case of eye contact

Flush eyes with water as a precaution. Get medical attention immediately if irritation persists.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if symptoms develop.

FIREFIGHTING MEASURES**Conditions of flammability**

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

No known products

ACCIDENTAL RELEASE MEASURES**Personal precautions**

Prevent skin/eye contact. Use personal protective equipment as needed.

Environmental precautions

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

Methods and materials for containment and cleaning up

Clean up spills immediately. Use absorbent materials if needed and dispose into a chemical waste container.

HANDLING AND STORAGE**Precautions for safe handling**

No special measures necessary. Good laboratory technique should be used when handling.

No special measures necessary. Store at room temperature.

Incompatible Products

No known products.

Conditions for safe storage

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	liquid
Color	colorless
Odor	no data available

Safety data

pH	no data available
Melting point/freezing point	no data available
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Autoignition Temperature	no data available

Lower explosion limit	no data available
Upper explosion limit	no data available
Vapor pressure	no data available
Density (water=1)	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Relative vapour Density	no data available
Odour Threshold	no data available
Evaporation rate	no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

No further relevant data available.

Possibility of hazardous reactions

No further relevant data available.

Materials to avoid

No further relevant data available.

Hazardous decomposition products

No dangerous decomposition products known.

TOXICOLOGICAL INFORMATION

Acute toxicity LD/LC50 values

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Skin corrosion/irritation

no data available

Carcinogenicity

No components of this product are listed by IARC, ACGIH, NTP and OSHA.

Reproductive toxicity

no data available

Teratogenicity

no data available

Aspiration hazard

no data available

Synergistic effects

no data available

12. ECOLOGICAL INFORMATION**Toxicity**

no data available

PBT and vPvB assessment

no data available

Persistence and degradability

no data available

Other adverse effects

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

13. DISPOSAL CONSIDERATIONS

Product

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards

No known OSHA hazards.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards.

16. OTHER INFORMATION

For educational use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.