

X-Gal, Ultra Pure Grade

**Section 1. Identification**

**Product Identifier**

Catalog Number: X1205

Recommended use of the chemical and restrictions on use  
For research use only. Not intended for human or animal diagnostic or therapeutic uses

Manufacture/Supplier Details: Alpha Teknova, Inc.  
2290 Bert Dr.  
Hollister, CA 95023  
Telephone Number: 831-637-1100

**Emergency Telephone Numbers**

CHEMTREC Emergency Phone Number: (800) 424-9300

**Section 2. Hazard Identification**

Classification of the substance/mixture: Is a hazardous substance or mixture.

**GHS Label elements, including precautionary statements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).  
Is a hazardous substance or mixture.



Pictogram:

Hazard statements: Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled

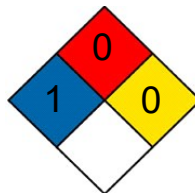
Signal word: Warning

Precautionary Statements: Avoid breathing dust/fume/gas/mist/vapors/spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF WALLOUED: Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

HMIS rating (Scale 0-4):

<b>HEALTH</b>	1
<b>FIRE</b>	0
<b>REACTIVITY</b>	0

NFPA Rating:



Hazards not otherwise classified: None

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**Section 3. Composition/Information On Ingredients**

Chemical Name	Identifiers	Hazardous	Approximate Percentage %
X-Gal	CAS: 7240-90-6	hazardous	100%

**Chemical Characterization:** Mixture

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**Section 4. First-Aid Measures**

Description of necessary measures

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

**Skin:** Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops or persists

**Eye:** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**Ingestion:** Do not induce vomiting. Get medical attention if adverse health effects develop or persist.

**Most important symptoms/effects, acute and delayed**

No further relevant information available

**Indication of any immediate medical attention and special treatment needed**

All treatment should be based on observed sign and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

**Section 5. Fire Fighting Measures**

**Extinguishing media:** This is a nonflammable powder  
**Suitable extinguishing media:** Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable Extinguishing:** None known

**Special hazards arising from the substance or mixture**

**Unusual fire and explosion hazards:** No specific fire or explosion hazard  
**Hazardous Combustions products:** None known

**Special protective equipment and precautions for the fire-fighters** Wear suitable protective clothing to prevent contact with skin and eyes and self contained breathing apparatus.

**Section 6. Accidental Release Measures**

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**Personal precautions, protective equipment and emergency procedures**

Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not touch or walk through spilled material. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

**Environmental precautions**

Avoid run off to waterways and sewers.

**Methods and materials for containment and cleaning up**

Absorb with liquid-binding material.

Dispose contaminated material as waste according to item 13.

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**Section 7. Handling And Storage**

Precautions for safe handling:

Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

**Conditions for safe storage, including and incompatibilities**  
Storage:

Keep labeled container tightly closed and upright. Keep frozen.

Incompatible materials or Ignition sources:

Keep away from strong oxidizers.

**Section 8. Exposure Controls/Personal Protection**

**Control parameters**

Occupational exposure Limit values:

Contains no substances with occupational exposure limit values.

Appropriate engineering controls:

General industrial hygiene practice.

**Personal protective equipment**

Eye protection:

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hand Protection:

Protective gloves. The glove material has to be impermeable and resistant to the product/the substance/ the preparation.

Respiratory Protection:

None required under normal conditions of use

**Section 9. Physical And Chemical Properties**

Appearance	: Powder
Odor	: none
Odor Threshold	: no data available
pH	: no data available
Melting point/freezing point	: no data available
Initial boiling point & boiling range	: no data available
Flash point	: no data available
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Partition coefficient	: no data available
Vapor pressure	: no data available
Vapor density	: no data available
Relative density (water)	: no data available
Solubility	: Soluble in water
Upper/lower flammability or explosive limits	: no data available
Auto-ignition temperature	: no data available
Decomposition temperature	: no data available
Viscosity	: no data available

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Other information: None

**Section 10. Stability And Reactivity**

Reactivity: No specific test data related to reactivity available for this product or its ingredients

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: Under normal conditions of storage and used, hazardous reactions should not occur.

Conditions to avoid: No specific data

Incompatible materials: No specific data

Hazardous decomposition products: Under normal conditions of storage and used, hazardous decomposition products should not be produced.

**Section 11. Toxicological Information**

**Information on toxicological effects**

**Acute toxicity**

Product/Ingredient Name	CAS	Result	Species	Dose	Exposure
X-Gal, Ultra Pure Grade	-	-	-	-	-

**Irritation/Corrosion**

Product/Ingredient Name	Result	Species	Score	Exposure/Observation
X-Gal, Ultra Pure Grade	-	-	-	-

Sensitization: Not available

Mutagenicity: Not available

**Carcinogenicity**

Product/Ingredient Name	OSHA	IARC	NTP
X-Gal, Ultra Pure Grade	None of the ingredients listed	None of the ingredients listed	None of the ingredients listed

Reproductive toxicity: Not available

Teratogenicity: Not available

Specific target organ toxicity- single exposure: Not available

Specific target organ toxicity- repeated exposure: Not available

Aspiration Hazard: Not available

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**Information on the likely routes of exposure**

Routes of entry anticipated: Oral

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact:** No specific data  
**Inhalation:** No specific data  
**Skin contact:** No specific data  
**Ingestion:** No specific data  
**Aspiration Hazard** No specific data

**Delayed and immediate effects and also chronic effects from short and long term exposure**

No known significant effects or critical hazards.

**Numerical measures of toxicity**

Not available

Section 12. Ecological Information

**Toxicity**

Product/ingredient name	Result	Species	Exposure
X-Gal, Ultra Pure Grade	-	-	-

**Persistence and degradability:** Not available

**Bioaccumulative potential** Not available

**Mobility in soil** Not available

**Other adverse effects** Not available

**Aspiration Hazard** No known significant effects or critical hazards.

Section 13. Disposal Considerations

**Waste treatment methods**

**Product waste:** Dispose of content and/or container in accordance with local, regional, national, and/or international regulations

**Packaging waste:** Dispose of content and/or container in accordance with local, regional, national, and/or international regulations

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Section 14. Transport Information

	UN Number	UN proper shipping name	Transport hazard class(es)	Packaging group	Environmental Hazards
<b>DOT</b>	Not regulated	-	-	-	none
<b>IMDG</b>	Not regulated	-	-	-	none
<b>IATA</b>	Not regulated	-	-	-	none

**Transport in bulk according to Annex II of Marpol 73/78 and the IBC code**

This product is provided only in non-bulk containers


**Special Precautions for user**

None specified

Section 15. Regulatory Information

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

Sara	:	Not applicable
Section 355 (Extremely hazardous substances)	:	Substance is not listed
Section 313 (Specific toxic chemical listings)	:	Substance is not listed
SARA 311/312 Hazards		
No SARA Hazards		
TSCA (Toxic substances control act)	:	Substance is not listed
Proposition 65:		
Chemicals known to cause cancer	:	Substance is not listed
Chemicals known to cause reproductive toxicity or females	:	Substance is not listed
Chemicals known to cause reproductive toxicity for males	:	Substance is not listed
Chemicals known to cause developmental toxicity	:	Substance is not listed
<b>Carcinogenic categories</b>		
EPA (Environmental protection agency)	:	Substance is not listed
TLV (Threshold limit value established by ACGIH)	:	Substance is not listed
NIOSH-CA (National institute for occupational safety and health)	:	Substance is not listed
OSHA-CA (occupational safety & health administration)	:	Substance is not listed
GHS label elements	:	The product is classified and labeled according to the Globally Harmonized System (GHS).
Hazard pictograms	:	
Decomposition temperature	:	Not applicable
Viscosity	:	Not applicable
Signal Word	:	Warning
Hazard-determining components of labeling	:	Not applicable
Hazard statements	:	Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled Avoid breathing dust/fume/gas/mist/vapors/spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection.
Precautionary statements	:	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
National regulations	:	Substance is not listed
State right to know	:	Substance is not listed
Chemical safety assessment	:	A Chemical Safety Assessment has not been carried out.



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Section 16. Other Information

**Disclaimer/Statement of Liability:** The information contained herein is believed to be accurate but is not warranted to be so. Data and calculation are based on information furnished by the manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstance of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in section 1.

**Warranty**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Teknova, inc. Shall not be held liable for any damage resulting from handling or from contact with the above product.  
Teknova, inc.

**Key to abbreviations: NDA=** No data available