

# MSDS

## Material Safety Data Sheet

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)  
Classification according to Regulation (EC) No. 1272/2008 [CLP]

### 1. Product and Company Identification

Product Name	X-GAL, 5-Bromo-4-chloro-3-indolyl $\beta$ -D-galactoside
Product References	TBR0110 (1 g)
Brand	TIARIS BIOSCIENCES
Manufacturer/ Supplier	Tiaris Biosciences SL Parque Tecnológico Rabanales 21, Edificio Aldebarán, Calle Astrónoma Cecilia Payne s/n. 14014. Córdoba, España Phone: +34 681 867 714   mailto: <a href="mailto:info@tiarisbiosciences.com">info@tiarisbiosciences.com</a> web: <a href="http://www.tiarisbiosciences.com">www.tiarisbiosciences.com</a>
Emergency Telephone	900-868538 (CHEMTREC Spain)   +34 931 768 545 (CHEMTREC International)

### 2. Hazards Identification


#### 2.1. Classification According to Regulation (EC) N°1272/2008 (EU-GHS/CLP)

**H302** Harmful if swallowed (Category 4).

**H312** Harmful in contact with skin (Category 4)

**H332** Harmful if inhaled (Category 4)

#### 2.2. Label Elements and Precautionary Statements

Pictogram	Signal Word
	<b>WARNING</b>

**P261** Avoid breathing mist or vapors.

**P264** Wash hands thoroughly after handling

**P271** Use only outdoors or in a well-ventilated area

**P280** Wear protective gloves/ protective clothing/ eye protection/ face protection.

**P312** Call a doctor if you feel unwell.

**P501** Dispose of contents/ container to an authorized waste collection point.

#### 2.3. Other hazards

Dust in eyes may cause mechanical irritation. Dust from this product may cause irritation to the respiratory tract. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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### 3. Composition / Information on Components

Component	CAS Number	EC Number	Weight (%)	Classification according to Regulation (EC) No.1272/2008 [CLP]
X-GAL, 5-Bromo-4-chloro-3-indolyl β-D-galactoside	7240-90-6	230-640-8	100	Oral Acute Tox. 4 (H302) Dermal Acute Tox. 4 (H312) Inhalat Acute Tox. 4 (H332)

### 4. First-Aid Measures

<b>Inhalation</b>	Remove to fresh air. If symptoms persist, seek medical attention.
<b>Skin Contact</b>	Take off immediately all contaminated clothing. Rinse skin with water/ shower.
<b>Eye Contact</b>	Remove contact lenses. Flush with plenty of water.
<b>Ingestion</b>	Rinse out mouth with water, then drink plenty of water (100-200 mL). Do not induce vomiting. Seek medical help immediately.
<b>Notes to Physician</b>	Not information available. Treat symptomatically.

### 5. Fire Fighting Measures

<b>Extinguish Media</b>	
Suitable Extinguish Media	Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.
Unsuitable Extinguish Media	None known.
<b>Special hazards during fire fighting</b>	Not flammable product. Hazardous decomposition products: Carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride, hydrogen bromide.
<b>Advice for firefighters</b>	In the event of fire, wear self-contained breathing apparatus and full protective gera.

### 6. Accidental Release Measures

<b>Personal Precautions, protective equipment and emergency procedures</b>	Ensure adequate ventilation. Avoid dust formation and breathing dust. Avoid contact with eyes, skin and clothing. Use personal protection equipment.
<b>Environmental Precautions</b>	Prevent large amounts of the product enters sewers or public waters. If it occurs, notify to authorities.
<b>Methods and Material for Containment and Cleaning up</b>	Minimize dust generation. Sweep or shovel spills into appropriate container for disposal.

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### 7. Handling and Storage

<b>Advice on protection against fire and explosion</b>	Normal measures for preventive fire protection.
<b>Precautions for Safe Handling</b>	Ensure good ventilation where dust is formed. Avoid dust formation. Avoid breathing dust. Avoid contact with skin, eyes and clothing.
<b>Conditions for Safe Storage, Including Any Incompatibilities</b>	Tightly closed. Store at -20°C. Incompatible with strong oxidizing agents
<b>Specific End Use(s)</b>	For research use only

### 8. Exposure Control/ Personal Protection

**Personal Protective Equipment:** Avoid all unnecessary exposure

**Respiratory Protection**

In case of insufficient ventilation and possible dust formation, use suitable mask with P1 filter conforming to EN 143.

**Hand Protection**

Handle with standard protective gloves against chemicals conforming to EN 374. Gloves must be inspected prior to use. Use proper glove removal technique (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.

**Eye Protection**

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and Body Protection Impervious Clothing.**

Wear appropriate protective gloves and a lab coat to prevent skin exposure.

### 9. Physical and Chemical Properties

<b>Appearance:</b>	Solid
<b>Form:</b>	Crystalline
<b>Colour:</b>	White
<b>Odour:</b>	Odourless
<b>pH (Value):</b>	No data available
<b>Boiling Point:</b>	Not applicable
<b>Melting Point:</b>	230 °C

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<b>Flash Point:</b>	No data available
<b>Flammable Limits:</b>	No data available
<b>Auto Ignition Temperature:</b>	No data available
<b>Explosive Properties:</b>	No data available
<b>Oxidising Properties:</b>	No data available
<b>Vapour Pressure (mm Hg):</b>	No data available
<b>Density (g/ml):</b>	No data available
<b>Solubility (Water):</b>	No data available
<b>Solubility (Other):</b>	No data available
<b>Partition Coefficient:</b>	No data available

### 10. Stability and Reactivity

<b>Possibility of Hazardous Reaction:</b>	None known.
<b>Chemical Stability:</b>	The product is chemically stable under standard ambient conditions (room temperature)
<b>Hazardous Decomposition Product(s):</b>	Nitrogen oxides, carbon monoxide, carbon dioxide, hydrogen chloride, hydrogen bromide
<b>Conditions to avoid:</b>	Extremely high or low temperatures
<b>Incompatible Materials:</b>	Strong oxidizing agents.

### 11. Toxicology Information

- Acute toxicity:**
  - Acute oral toxicity:** harmful if swallowed.
  - Acute inhalation toxicity:** harmful is inhaled.
  - Acute dermal toxicity:** harmful in contact with skin.
- Skin corrosion/irritation:** not classified.
- Serious eye damage/eye irritation:** not classified.
- Respiratory or skin sensitization:** not classified.
- Germ cell mutagenicity:** not classified.
- Carcinogenicity:** not classified.
- Reproductive toxicity:** not classified.
- Specific target organ toxicity – single exposure (GHS):** not classified.
- Specific target organ toxicity – repeated exposure (GHS):** not classified.
- Aspiration hazard:** not classified.

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### 12. Ecological Information

<b>Toxicity:</b>	No additional information available.
<b>Persistence and Degradability:</b>	No additional information available.
<b>Bioaccumulative Potential</b>	No additional information available.
<b>Mobility in Soil:</b>	No additional information available.
<b>Endocrine Disrupting Effects:</b>	No additional information available.
<b>PBT and vPvB Assessment</b>	Not meet the criteria of REACH regulation, annex XIII.
<b>Other Adverse Effect:</b>	No additional information available.

### 13. Disposal Considerations

**Contaminated packaging:**

Dispose of in a safe manner according to local regulations.

### 14. Transport Information

<b>IATA / ADR / DOT-US / IMDG:</b>	Not Applicable.
<b>UN number or ID number:</b>	Not Applicable.
<b>UN Proper Shipping Name:</b>	Not Applicable.
<b>Transport Hazard Class(es):</b>	Not Applicable.
<b>Packing Group:</b>	Not Applicable.
<b>Special Precautions for User:</b>	Not Applicable.
<b>Maritime Transport in Bulk according to IMO Instruments:</b>	Not Applicable.

### 15. Regulatory Information

<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	None
Chemical Safety Assessment	None

### 16. Other 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. *Tiaris Biosciences* shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.