

XGAL-100 – X-GAL Beta-Galactosidase Substrate

Safety Data Sheet

Revision Date: 01/08/2016

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 05/15/2009

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier **Product Name** 5-Bromo-4-Chloro-3-indolyl**Other means of identification****Product Code(s)** XGAL-0100**Synonyms** X-GAL Beta-Galactosidase Substrate**Recommended use of the chemical and restrictions on use****Recommended Use** For Further Manufacturing Use Only.**Uses advised against** Not for Human or Animal Drug Use**Details of the supplier of the safety data sheet****Company Address**

Rockland Immunochemicals, Inc.

321 Jones Blvd.

Pottstown, PA 19464

Company Phone Number 1. 800.656.7625**E-mail Address** tech@rockland-inc.com**Emergency Telephone Number****Emergency Telephone Number** Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification**OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Label elements**Emergency Overview****Appearance** White**Physical State** Powder**Odor** No information available**Hazards not otherwise classified (HNOC)**

Not regulated

Other Information

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
.beta.-D-Galactopyranosi de, 5-bromo-4-chloro-1H-indol-3-yl	7240-90-6	230-640-8	95-100	Not applicable

4. FIRST AID MEASURES
First Aid Measures
Eye Contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Inhalation

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion

Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed
Most Important Symptoms/Effects No information available.

Indication of any immediate medical attention and special treatment needed
Notes to Physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES
Suitable Extinguishing Media

 Dry chemical, CO₂, water spray or regular foam.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

No information available.

Hazardous Combustion Carbon oxides. Nitrogen oxides (NOx). Hydrogen Chloride gas. Hydrogen bromide gas. **Products**
Explosion Data
Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES
Personal precautions, protective equipment and emergency procedures
Personal protection

Ensure adequate ventilation, especially in confined areas.

Environmental Precautions

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Environmental Precautions

See Section 12 for additional Ecological information.

Methods and material for containment and cleaning up
Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up

Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Handling

Handle in accordance with good industrial hygiene and safety practice. Heat Sensitive. Light Sensitive. Moisture sensitive.

Conditions for safe storage, including any incompatibilities
Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from light. Keep away from heat. Protect from moisture.

Incompatible Products

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
.beta.-D-Galactopyranoside, 5-bromo-4-chloro-1H-indol-3-yl 7240-90-6	-	-	-

Appropriate engineering controls
Engineering Measures

 Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment
Eye/Face Protection

Safety glasses with side-shields.

Skin and Body Protection

Wear protective gloves/clothing.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties
Physical State

Powder

Appearance

White

Odor

 No information
 available

Color

No information available

Odor Threshold

 No information
 available

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<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point		
Boiling Point/Range	No information available	
Flash Point (High in °C)	No information available	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor Density	No information available	
Specific Gravity	No information available	
Water Solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	
Other Information		
	No information available	
Softening Point	No information available	
Molecular Weight	No information available	
VOC Content	No information available	
Density	No information available	
Bulk Density	No information available	

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under recommended storage

 conditions. **Possibility of Hazardous**
Reactions None under normal processing.

Conditions to Avoid

 Protect from light and moisture. Protect from light. Protect from moisture. **Incompatible Materials** Strong oxidizing agents.

Hazardous Decomposition Products

Carbon oxides. Nitrogen oxides (NOx). Hydrogen chloride gas. Hydrogen bromide gas.

11. TOXICOLOGICAL INFORMATION

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Information on likely routes of exposure
Product Information
Inhalation There is no data available for this product.

Eye Contact There is no data available for this product.

Skin Contact There is no data available for this product.

Ingestion There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
.beta.-D-Galactopyranoside, 5-bromo-4-chloro-1H-indol-3-yl 7240-90-6	-	-	-

Information on toxicological effects
Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
.beta.-D-Galactopyranoside, 5-bromo-4-chloro-1H-indol-3-yl 7240-90-6	-	-	-	-

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION
Ecotoxicity

100% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Toxicity to Fish	Crustacea
.beta.-D-Galactopyranoside, 5-bromo-4-chloro-1H-indol-3-yl 7240-90-6	-	-	-

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Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Partition coefficient
.beta.-D-Galactopyranoside, 5-bromo-4-chloro-1H-indol-3-yl 7240-90-6	-

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS
Waste treatment methods
Waste Disposal Method

Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging

Do not re-use empty containers.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
.beta.-D-Galactopyranoside, 5-bromo-4-chloro-1H-indol-3-yl 7240-90-6	-	-	-	-
Chemical Name	California Hazardous Waste Status			
.beta.-D-Galactopyranoside, 5-bromo-4-chloro-1H-indol-3-yl 7240-90-6	-			

14. TRANSPORT INFORMATION
DOT Not regulated

IATA Not regulated

15. REGULATORY INFORMATION
International Inventories

TSCA	Does not comply
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Does not Comply
IECSC	Complies
KECL	Does not Comply
PICCS	Does not Comply
AICS	Does not Comply

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

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AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations
SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values %
.beta.-D-Galactopyranoside, 5-bromo-4-chloro-1H-indol-3-yl 7240-90-6 (95-100)	-

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
.beta.-D-Galactopyranoside, 5-bromo-4-chloro-1H-indol-3-yl 7240-90-6	-	-	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
.beta.-D-Galactopyranoside, 5-bromo-4-chloro-1H-indol-3-yl 7240-90-6	-	-	-

U.S. State Regulations
California Proposition 65

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
.beta.-D-Galactopyranoside, 5-bromo-4-chloro-1H-indol-3-yl - 7240-90-6	-

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
.beta.-D-Galactopyranoside, 5-bromo-4-chloro-1H-indol-3-yl 7240-90-6	-	-	-

U.S. EPA Label Information

EPA Pesticide Registration Number Not regulated

16. OTHER INFORMATION

 Issuing Date 15-May-2009
 Revision Date 08-Jan-2016
 Revision Note

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Disclaimer

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