# **Material Safety Data Sheet**

Section 1. Ch	Section 1. Chemical Product and Company Identification				
Common Name	All-in-One Beta-Galactosidase Assay Reagent		0075705		
Supplier	Pierce Chemical Company P.O. Box 117 Rockford, IL 61105 United States 815.968.0747	MSDS#  Validation Date  Print Date	6/30/99 6/30/99		
Synonym  Trade name	Not available.	Responsible Name	~		
Material Uses  Manufacturer	Pierce Chemical Company P.O. Box 117 Rockford, IL 61105	Emergency 800.4 OUTS	CHEMTREC: 124.9300 SIDE US: 183.7616		
	United States 815.968.0747				

Section 2. Composition and Information on Ingredients			
Name	CAS#	% by Weight	Exposure Limits
B-Galactosidase Assay Reagent     B-Galactosidase Assay Reagent     B-Galactosidase Assay Reagent     B-Galactosidase Assay Reagent		1 1 1	Not available. Not available. Not available.

Section 3. Hazards Identification		
<b>Physical State and Appearance</b>	Liquid.	
<b>Emergency Overview</b>	WARNING! CAUSES DAMAGE TO THE FOLLOWING ORGANS: MUCOUS MEMBRANES, RESPIRATORY TRACT, SKIN, EYES.	
Routes of Entry	Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.	
<b>Potential Acute Health Effects</b>		
Eyes	Slightly hazardous in case of eye contact (irritant).	
Skin	Sensitization of the product: Not available. Slightly hazardous in case of skin contact (irritant). Non-permeator by skin. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.	
Inhalation	Non-irritant for lungs.	
Ingestion	Slightly hazardous in case of ingestion.	
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Not available.  MUTAGENIC EFFECTS: Not available.  TERATOGENIC EFFECTS: Not available.	
Medical Conditions Aggravated by Overexposure:	Repeated or prolonged exposure is not known to aggravate medical condition.	
Overexposure /Signs/Symptoms	Not available.	

All-in-One Beta-Galactosidase Assay	
Reagent	

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Section 4. First Aid Measures		
Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.	
Skin Contact	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.	
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.	
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.	
Notes to Physician	Not available.	

Section 5. Fire Fighting Measures			
Flammability of the Product	May be combustible at high temperature.		
<b>Auto-ignition Temperature</b>	Not available.		
Flash Points	Not available.		
Flammable Limits	Not available.		
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2). Some metallic oxides.		
Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence of open flames and sparks.  Non-flammable in presence of shocks, of heat, of oxidizing materials, of reducing materials, of combustible materials, of organic materials, of metals, of acids, of alkalis.		
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.		
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder.  LARGE FIRE: Use water spray, fog or foam. Do not use water jet.		
<b>Protective Clothing (Fire)</b>	Be sure to use an approved/certified respirator or equivalent.		
Special Remarks on Fire Hazards	Not available.		
Special Remarks on Explosion Hazards	Not available.		

Section 6. Accidental Release Measures		
Small Spill and Leak	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.	
Large Spill and Leak  Absorb with an inert material and put the spilled material in an appropriate waste dispocleaning by spreading water on the contaminated surface and allow to evacuate through to system.		

Section 7. Handling and Storage		
Handling	Avoid breathing vapors or spray mists.	
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.	

### Section 8. Exposure Controls/Personal Protection **Engineering Controls** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location. **Personal Protection** Eyes Safety glasses. Body Lab coat. Respiratory Not applicable. Hands Not applicable. Feet Not applicable. **Protective Clothing** (Pictograms) Personal Protection in Case of Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; a Large Spill consult a specialist BEFORE handling this product. **Product Name Exposure Limits**

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1) B-Galactosidase Assay Reagent	Not available.	
2) B-Galactosidase Assay Reagent	Not available.	
3) B-Galactosidase Assay Reagent	Not available.	
Consult local authorities for acceptable exposure limits.		

Physical State and Appearance	Liquid.	Odor	Not available.
Molecular Weight	Not applicable.	Taste	Not available.
Molecular Formula	Not applicable.	Color Not available.	
pH (1% Soln/Water)	Neutral.		
<b>Boiling/Condensation Point</b>	The lowest known value is 100°C (212°F) (Milli-Q Water).		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Specific Gravity	The only known value is 1 (Water = 1) (Milli-Q Water).		
Vapor Pressure	The highest known value is 2.3 kPa (@ 20°C) (Milli-Q Water).		
Vapor Density	The highest known value is 0.62 (Air = 1) (Milli-Q Water).		
Volatility	Not available.		

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Odor Threshold	Not available.	
<b>Evaporation Rate</b>	Not available.	
VOC	Not available.	
Viscosity	Not available.	
LogK <sub>ow</sub>	The product is much more soluble in water.	
Ionicity (in Water)	Not available.	
<b>Dispersion Properties</b>	See solubility in water, methanol.	
Solubility	Easily soluble in cold water, hot water, methanol. Insoluble in diethyl ether, n-octanol.	
Physical Chemical Commo	ents Not available.	

Section 10. Stability and Reactivity	
Stability and Reactivity	The product is stable.
<b>Conditions of Instability</b>	Not available.
Incompatibility with Various Substances	Slightly reactive to reactive with acids.  Non-reactive with oxidizing agents, alkalis.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Not available.

Section 11. Toxicological Information	
<b>Toxicity to Animals</b>	LD50: Not available. LC50: Not available.
<b>Chronic Effects on Humans</b>	Causes damage to the following organs: mucous membranes, upper respiratory tract, skin, eyes.
Other Toxic Effects on Humans	Slightly hazardous in case of skin contact (irritant), of ingestion, . Non-permeator by skin. Non-irritant for lungs.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on Other Toxic Effects on Humans	Not available.

Section 12. Ecological Information	
Not available.	
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.	

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<b>Toxicity of the Products of Biodegradation</b>	The product itself and its products of degradation are not toxic.	
Special Remarks on the Products of Biodegradation	Not available.	

Section 13. Disposal Considerations	
Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Stream	Not available.
Consult your local or regi	ional authorities.

Section 14. Transport Information		
DOT Classification	Not a DOT controlled material (United States).	
	Not available.	
Marine Pollutant	Not available.	
Special Provisions for Transport	Not applicable.	
ADR/RID Classification	Not controlled under ADR (Europe).	
IMO/IMDG Classification	Not controlled under IMDG.	
ICAO/IATA Classification	Not controlled under IATA.	

HCS Classification	Not controlled under the HCS (United States).
U.S. Federal Regulations	TSCA 8(b) inventory: B-Galactosidase Assay Reagent SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution - chemical inventory - hazard identification: B-Galactosidase Assay Reagent: immediate health hazard SARA 313 toxic chemical notification and release reporting: No products were found. Clean water act (CWA) 307: No products were found.
	Clean water act (CWA) 311: No products were found.
	Clean air act (CAA) 112 accidental release prevention: No products were found. Clean air act (CAA) 112 regulated flammable substances: No products were found. Clean air act (CAA) 112 regulated toxic substances: No products were found.
International Regulations	
EINECS	Not available.
DSCL (EEC)	This product is not classified according to the EU regulations.
International Lists	No products were found.
State Regulations	Pennsylvania RTK: B-Galactosidase Assay Reagent Massachusetts RTK: B-Galactosidase Assay Reagent New Jersey: B-Galactosidase Assay Reagent

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California prop. 65: No products were found.

#### Section 16. Other Information

**Label Requirements** 

CAUSES DAMAGE TO THE FOLLOWING ORGANS: MUCOUS MEMBRANES, RESPIRATORY TRACT, SKIN, EYES.

Hazardous Material Information System (U.S.A.)



National Fire Protection Association (U.S.A.)



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References

Not available.

Other Special Considerations

Not available.

Validated by Company on 6/30/99.

Verified by Company.

Printed 6/30/99.

**CALL CHEMTREC:** 

800.424.9300

**OUTSIDE US:** 

202.483.7616

#### **Notice to Reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.