

# Material Safety Data Sheet

## Procleix Target Enhancer Reagent

### 1. Product and company identification

<b>Product name</b>	: Procleix Target Enhancer Reagent
<b>Used in</b>	: Procleix Ultrio Plus Assay 302573, 302574.
<b>Material uses</b>	: In vitro diagnostic.
<b>Supplier/Manufacturer</b>	: Gen-Probe Incorporated 10210 Genetic Center Drive San Diego, CA 92121-4362
<b>MSDS #</b>	: 0087P
<b>In case of emergency</b>	: CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887

### 2. Hazards identification

#### Emergency overview

<b>Color</b>	: Colorless.
<b>Physical state</b>	: Liquid. [Clear.]
<b>Signal word</b>	: DANGER!
<b>Hazard statements</b>	: CAUSES EYE AND SKIN BURNS. HARMFUL IF SWALLOWED.
<b>Precautions</b>	: Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
<b>OSHA/HCS status</b>	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
<b>Routes of entry</b>	: Dermal contact. Eye contact. Inhalation. Ingestion.

#### Potential acute health effects

<b>Inhalation</b>	: May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
<b>Ingestion</b>	: Toxic if swallowed. May cause burns to mouth, throat and stomach.
<b>Skin</b>	: Corrosive to the skin. Causes burns.
<b>Eyes</b>	: Corrosive to eyes. Causes burns.

#### Potential chronic health effects

<b>Chronic effects</b>	: No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Inhalation</b>	: No specific data.
<b>Ingestion</b>	: Adverse symptoms may include the following: stomach pains
<b>Skin</b>	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
<b>Eyes</b>	: Adverse symptoms may include the following: pain watering redness

## 2. Hazards identification

**Medical conditions aggravated by over-exposure** : None known.

See toxicological information (section 11)

## 3. Composition/information on ingredients

### United States

Name	CAS number	%
Lithium hydroxide	1310-65-2	1 - 5

### Canada

Name	CAS number	%
Lithium hydroxide	1310-65-2	1 - 5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Hazardous materials listed are the same in each part number in " Used In " section, however due to differing non-hazardous components, the use of these products are not interchangeable. See package insert for product use.

## 4. First aid measures

- Eye contact** : Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention immediately.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call medical doctor or poison control center immediately.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## 5. Fire-fighting measures

**Flammability of the product** : No specific fire or explosion hazard.

### Extinguishing media

**Suitable** : Use an extinguishing agent suitable for the surrounding fire.

**Not suitable** : None known.

**Hazardous thermal decomposition products** : No specific data.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

**Personal precautions** : Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods for cleaning up

**Spill** : Stop leak if without risk. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## 7. Handling and storage

**Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## 8. Exposure controls/personal protection

### United States

Ingredient	Exposure limits
Lithium hydroxide	AIHA WEEL (United States, 1/2009). CEIL: 1 mg/m <sup>3</sup>

### Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	Notations
Lithium hydroxide	BC 10/2009	-	-	-	-	-	-	-	1	-	
Lithium hydroxide,	ON 7/2010	-	-	-	-	1	-	-	-	-	
Lithium hydroxide	US AIHA 1/2009	-	-	-	-	-	-	-	1	-	

### Consult local authorities for acceptable exposure limits.

**Recommended monitoring procedures** : Personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Engineering measures** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

## 8. Exposure controls/personal protection

- Hygiene measures** : Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.
- Personal protection**
- Respiratory** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Wear an appropriate NIOSH approved respirator if concentration levels exceed the safe exposure limits.
- Hands** : Compatible chemical resistant gloves.
- Eyes** : Not required under normal conditions of use. Safety eyewear should be used when there is a likelihood of exposure. Recommended: Chemical splash goggles or face shield.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Rubber apron and/on long sleeves.
- Environmental exposure controls** : In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9. Physical and chemical properties

- Physical state** : Liquid. [Clear.]
- Flash point** : [Product does not sustain combustion.]
- Color** : Colorless.
- pH** : 14
- Relative density** : 1
- Solubility** : Miscible in water.

## 10. Stability and reactivity

- Chemical stability** : The product is stable.
- Conditions to avoid** : No specific data.
- Materials to avoid** : Highly reactive or incompatible with the following materials: acids.  
Reactive or incompatible with the following materials: oxidizing materials.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

## 11. Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Lithium hydroxide	LC50 Inhalation Dusts and mists LD50 Oral	Rat Rat	960 mg/m <sup>3</sup> 210 mg/kg	4 hours -

- Chronic toxicity** : No specific data.

## 12. Ecological information

- Environmental effects** : Not established  
**Other adverse effects** : No known significant effects or critical hazards.





## 13. Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty containers or liners may retain some product residues. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>DOT Classification</b>	UN2679	LITHIUM HYDROXIDE solution	8	II		-
<b>TDG Classification</b>	UN2679	LITHIUM HYDROXIDE solution	8	II		-
<b>IMDG Class</b>	UN2679	LITHIUM HYDROXIDE solution	8	II		-
<b>IATA-DGR Class</b>	UN2679	LITHIUM HYDROXIDE solution	8	II		-

PG\* : Packing group

Exemption to the above classification may apply.

## 15. Regulatory information

### United States

**HCS Classification** : Corrosive material

**U.S. Federal regulations** : TSCA 8(a) IUR: Partial exemption

**United States inventory (TSCA 8b)**: All components are listed or exempted.

**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**: Lithium hydroxide

**SARA 311/312 MSDS distribution - chemical inventory - hazard identification**:

Lithium hydroxide: Immediate (acute) health hazard

**Clean Air Act (CAA) 112 accidental release prevention**: No products were found.

**Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

## 15 . Regulatory information

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**State regulations** :

- Connecticut Carcinogen Reporting**: None of the components are listed.
- Connecticut Hazardous Material Survey**: None of the components are listed.
- Florida substances**: None of the components are listed.
- Illinois Chemical Safety Act**: None of the components are listed.
- Illinois Toxic Substances Disclosure to Employee Act**: None of the components are listed.
- Louisiana Reporting**: None of the components are listed.
- Louisiana Spill**: None of the components are listed.
- Massachusetts Spill**: None of the components are listed.
- Massachusetts Substances**: None of the components are listed.
- Michigan Critical Material**: None of the components are listed.
- Minnesota Hazardous Substances**: None of the components are listed.
- New Jersey Hazardous Substances**: None of the components are listed.
- New Jersey Spill**: None of the components are listed.
- New Jersey Toxic Catastrophe Prevention Act**: None of the components are listed.
- New York Acutely Hazardous Substances**: None of the components are listed.
- New York Toxic Chemical Release Reporting**: None of the components are listed.
- Pennsylvania RTK Hazardous Substances**: None of the components are listed.
- Rhode Island Hazardous Substances**: None of the components are listed.

### California Prop. 65

California prop. 65: No products were found.

### Canada

**WHMIS (Canada)** : Class E: Corrosive material

**Canadian lists** :

- CEPA Toxic substances**: None of the components are listed.
- Canadian ARET**: None of the components are listed.
- Canadian NPRI**: None of the components are listed.
- Alberta Designated Substances**: None of the components are listed.
- Ontario Designated Substances**: None of the components are listed.
- Quebec Designated Substances**: None of the components are listed.

**Canada inventory** : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

### International regulations

**International lists** :

- Australia inventory (AICS)**: All components are listed or exempted.
- China inventory (IECSC)**: All components are listed or exempted.
- Japan inventory**: All components are listed or exempted.
- Korea inventory**: All components are listed or exempted.
- New Zealand Inventory of Chemicals (NZIoC)**: All components are listed or exempted.
- Philippines inventory (PICCS)**: All components are listed or exempted.

## 16 . Other information

### United States

**Label requirements** : CAUSES EYE AND SKIN BURNS. HARMFUL IF SWALLOWED.

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

Health	3
Flammability	0

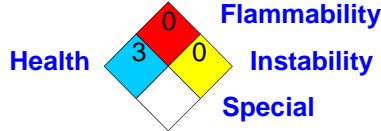
## 16 . Other information

Physical hazards 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

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



### Canada

WHMIS (Canada) :



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### 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.