



Material Safety Data Sheet

Optizyme rDNase I (RNase Free)

MSDS# 92993

Section 1 - Chemical Product and Company Identification

MSDS Name: Optizyme rDNase I (RNase Free)

Catalog Numbers: BP3226-1, BP3226-2

Synonyms: None Known.

Company Identification: Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410

For information in the US, call: 201-796-7100

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

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Risk Phrases:

CAS#: Not available

Chemical Name: Optizyme rDNase I (RNase Free)

%:

EINECS#: unlisted

Hazard Symbols:

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Risk Phrases:

CAS#: 56-81-5

Chemical Name: Glycerol

%: 50

EINECS#: 200-289-5

Hazard Symbols:

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Text for R-phrases: see Section 16

Hazard Symbols: None listed

Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! Hygroscopic (absorbs moisture from the air). This is expected to be a low hazard for usual industrial handling. Good laboratory procedures are recommended when handling this compound. May cause eye, skin, and respiratory tract irritation. Target Organs: No data found.

Potential Health Effects

Eye: May cause eye irritation.

Skin: Non-irritating to the skin.

Ingestion: May cause irritation of the digestive tract. Low hazard for usual industrial handling. May cause nausea and vomiting.

Inhalation: May cause respiratory tract irritation. Low hazard for usual industrial handling.

Chronic: May cause kidney injury.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Wash mouth out with water. Get medical aid if irritation or symptoms occur.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician:

### Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is nonflammable. Runoff from fire control or dilution water may cause pollution.

Extinguishing Media: Substance is nonflammable; use agent most appropriate to extinguish surrounding fire. Use agent most appropriate to extinguish fire.

Autoignition Temperature: Not available

Flash Point: Not available

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 1; flammability: 0; instability: 0;

### Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

### Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation.

Storage: Store in a tightly closed container. Store protected from moisture.

### Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Optizyme rDNase I (RNase Free)	none listed	none listed	none listed
Glycerol	10 mg/m3 (mist)	none listed	15 mg/m3 TWA (total); 5 mg/m3 TWA (respirable fraction)

OSHA Vacated PELs: Optizyme rDNase I (RNase Free): None listed Glycerol: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

- Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
- Skin: Wear appropriate gloves to prevent skin exposure.
- Clothing: Wear appropriate protective clothing to prevent skin exposure.
- Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### Section 9 - Physical and Chemical Properties

Physical State: Viscous liquid  
Color: colorless  
Odor: Not available  
pH: Not available  
Vapor Pressure: Not available  
Vapor Density: Not available  
Evaporation Rate: Not available  
Viscosity: Not available  
Boiling Point: Not available  
Freezing/Melting Point: Not available  
Decomposition Temperature: Not available  
Solubility in water: Not available  
Specific Gravity/Density:  
Molecular Formula: Solution  
Molecular Weight: 0

#### Section 10 - Stability and Reactivity

- Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions. Glycerol exhibits hygroscopic tendencies.
- Conditions to Avoid: None reported.
- Incompatibilities with Other Materials: None reported.
- Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.
- Hazardous Polymerization: Will not occur.

#### Section 11 - Toxicological Information

- RTECS#: CAS# 56-81-5: MA8050000  
RTECS: Not available. RTECS:  
**CAS# 56-81-5:** Draize test, rabbit, eye: 126 mg Mild;  
Draize test, rabbit, eye: 500 mg/24H Mild;  
Draize test, rabbit, skin: 500 mg/24H Mild;
- LD50/LC50: Inhalation, rat: LC50 = >570 mg/m<sup>3</sup>/1H;  
Oral, mouse: LD50 = 4090 mg/kg;  
Oral, rabbit: LD50 = 27 gm/kg;  
Oral, rat: LD50 = 12600 mg/kg;  
Skin, rabbit: LD50 = >10 gm/kg;
- Carcinogenicity: Optizyme rDNase I (RNase Free) - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
Glycerol - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
- Other: The toxicological properties have not been fully investigated.

#### Section 12 - Ecological Information

Not available

#### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14 - Transport Information

US DOT

Shipping Name: Please contact Fisher Scientific for shipping information

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not regulated as a hazardous material

Hazard Class:

UN Number:

Packing Group:

## Section 15 - Regulatory Information

### European/International Regulations

#### European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

#### WGK (Water Danger/Protection)

CAS# 56-81-5: 0

#### Canada

CAS# 56-81-5 is listed on Canada's DSL List

Canadian WHMIS Classifications: Not available

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

CAS# 0-01-1 is not listed on Canada's Ingredient Disclosure List.

CAS# 56-81-5 is not listed on Canada's Ingredient Disclosure List.

### US Federal

#### TSCA

CAS# 0-01-1 is not listed on the TSCA Inventory. It is for research and development use only.

CAS# 56-81-5 is listed on the TSCA Inventory.

## Section 16 - Other Information

MSDS Creation Date: 6/09/2004

Revision #5 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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