

SAFETY DATA SHEET

HYDRIZYME NO. 399
Product ID: FP039902
Revised: 03-26-2015
Replaces: 08-18-2014

1. IDENTIFICATION

Product Name: HYDRIZYME NO. 399
Synonyms: R03279/R07997/R17186/R24205
CAS Number: Mixture
Recommended Use: Enzyme cleaner for membranes.
Restrictions on Use: No data available.

Hydrite Chemical Co.
300 N. Patrick Blvd.
Brookfield, WI 53008-0948
(262) 792-1450

EMERGENCY RESPONSE NUMBERS:
24 Hour Emergency #: (414) 277-1311
CHEMTREC Emergency #: (800) 424-9300

2. HAZARD(S) IDENTIFICATION



Signal Word: Danger
GHS Classification: Respiratory Sensitisation Category 1
Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2A
Hazard Statements: Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements:

Prevention: Avoid breathing dust, gas, mist, vapors or spray.
Wash thoroughly after handling.
Wear gloves, eye and face protection and protective clothing.
In case of inadequate ventilation wear respiratory protection.
Response: IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see First Aid on SDS or on this label).
If skin irritation occurs: Get medical advice or attention.
If eye irritation persists: Get medical advice or attention.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
Take off contaminated clothing and wash before reuse.

Disposal: Dispose of in accordance with local, regional and international regulations.

Hazards Not Otherwise Classified: May be harmful or fatal if swallowed and enters airways.
Excessive exposure may cause central nervous system effects.

Percentage of Components with Unknown Acute Toxicity:

Dermal: 11.9 %
Inhalation Vapor: 14.4 %
Inhalation Dust/Mist: 14.4 %

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	% by Wt.
Triethanolamine Dodecylbenzene Sulfonate	27323-41-7	< 10 %
D-Glucopyranose, oligomeric, decy octyl glycosides	68515-73-1	< 7 %
Sodium Formate	141-53-7	< 5 %
D-Glucopyranose, oligomeric, C10-16-alkyl glycosides	110615-47-9	< 5 %
Protease Enzyme Protein	9014-01-1	< 1.0 %

4. FIRST-AID MEASURES

Eye Contact: If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Remove contact lens if easy to do.

Skin Contact: If on skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. Wash with soap and water. Discard contaminated leather articles such as shoes and belt. Destroy contaminated leather clothing.

Inhalation: If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

Ingestion: If swallowed: If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Note to Physicians:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

Most Important Symptoms/Effects:

Eye Contact: May cause mild irritation. May cause: irritation. tearing.

Skin Contact: May cause mild irritation. Prolonged and repeated exposure may cause: redness. itching.

Skin Absorption: No absorption hazard expected under normal use.

Inhalation: May cause mild irritation. Mists may irritate: upper respiratory tract. nose. throat. May cause: nasal discomfort and discharge. coughing.

Ingestion: May cause mild irritation. Large amounts may cause: abdominal discomfort. nausea. diarrhea. Excessive exposure may cause: central nervous system effects. Aspiration of liquid may cause lung damage.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Alcohol foam. Carbon dioxide. Dry chemical. Water spray. Water fog.

Fire Fighting Methods: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers. Move containers from fire area if possible without hazard. Container may rupture from gas generation in a fire situation.

Fire and Explosion Hazards: None known. Heat from fire can generate flammable vapor. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Vapors may be heavier than air. May travel long distances along the ground before igniting and flashing back to vapor source.

Hazardous Combustion Products: Carbon dioxide. Carbon monoxide. Aldehydes. Ketones. Toxic vapors.

6. ACCIDENTAL RELEASE MEASURES

Spill Clean-Up Procedures: Eliminate all sources of ignition. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit. Contain spill, place into drums for proper disposal. Soak up residue with inert absorbent material. Place in non-leaking containers for immediate disposal. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. CAUTION: Spilled material may be slippery.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Use good personal hygiene and housekeeping. Always open containers slowly to allow any excess pressure to vent.

Storage: Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. CAUTION: Spilled material may be slippery. Clean up spills immediately before walking in spill area. Store out of direct sunlight. See Section 10 for incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

Component	Limits
No components found.	

ACGIH Exposure Guidelines:

Component	Limits
Protease Enzyme Protein	0.00006 mg/m ³ Ceiling (as crystalline active enzyme, listed under Subtilisins)

Engineering Controls: General room ventilation and local exhaust are required. Maintain adequate ventilation. Avoid creating dust or mist. Do not use in closed or confined spaces. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

Eye/Face Protection: Wear chemical safety goggles while handling this product. Do not wear contact lenses. Wear additional eye protection such as chemical safety goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Chemical-resistant. Impervious.

Respiratory Protection: Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If vapors, mists or spray is present, wear: NIOSH-Approved air-purifying respirator with: Organic vapor cartridge and Dust/mist filter. NIOSH-Approved Supplied Air Respirator (SAR). DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

Other Protective Equipment: Eye-wash station. Safety shower. Chemical safety shoes. Protective clothing.

General Hygiene Conditions: Food, beverages, and tobacco products should not be carried, stored or consumed where this material is in use. Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.
Color: Clear. Light yellow / brown.
Odor: Mild odor.
Odor Threshold: N.D.
pH: 8.20 (as is)
Freezing Point (deg. F): N.D.
Melting Point (deg. F): N.D.
Initial Boiling Point or Boiling Range: N.D.
Flash Point: N.A.
Flash Point Method: N.A.
Evaporation Rate (nBuAc = 1): N.D.
Flammability (solid, gas): N.D.
Lower Explosion Limit: N.A.
Upper Explosion Limit: N.A.
Vapor Pressure (mm Hg): N.D.
Vapor Density (air=1): N.D.
Specific Gravity or Relative Density: 1.042 @ 25 Deg. C
Solubility in Water: Complete
Partition Coefficient (n-octanol/water): N.D.
Autoignition Temperature: No Data
Decomposition Temperature: N.D.
Viscosity: N.D.
% Volatile (wt%): N.D.
VOC (wt%): N.D.
VOC (lbs/gal): N.D.
Fire Point: N.D.

10. STABILITY AND REACTIVITY

Reactivity: No data available.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions.

Conditions to Avoid: Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems.

Incompatible Materials: Strong oxidizing agents. Strong acids. Strong bases. Strong alkalies. Bases. Oxidizing agents.

Hazardous Decomposition Products: Carbon dioxide. Carbon monoxide. Aldehydes. Ketones. Toxic vapors. Alcohols. Ethers. Organic acids. Carbon oxides. Hydrogen gas.

11. TOXICOLOGICAL INFORMATION

Component	Oral LD50	Dermal LD50	Inhalation LC50
Propylene Glycol	Rat: 20,000 mg/kg	Rabbit: 20,800 mg/kg	No Data
Triethanolamine	Rat: 2320 mg/kg	No Data	No Data
Dodecylbenzene Sulfonate			
Sodium Formate	Rat: 11,200 mg/kg	Rat: > 2000 mg/kg	No Data
Protease Enzyme Protein	Rat: > 2000 mg/kg	Rabbit: > 2 ml/kg	4H Rat: 0.8 mg/L

Routes of Exposure: Ingestion. Eyes. Skin. Inhalation.

Eye Contact: May cause mild irritation. May cause: irritation. tearing.

Skin Contact: May cause mild irritation. Prolonged and repeated exposure may cause: redness. itching.

Skin Absorption: No absorption hazard expected under normal use.

Inhalation: May cause mild irritation. Mists may irritate: upper respiratory tract. nose. throat. May cause: nasal discomfort and discharge. coughing.

Ingestion: May cause mild irritation. Large amounts may cause: abdominal discomfort. nausea. diarrhea. Excessive exposure may cause: central nervous system effects. Aspiration of liquid may cause lung damage.

Medical Conditions Aggravated by Exposure to Product: Eye disorders. Kidney disorders. Skin disorders. Respiratory system disorders.

Other: Liquid enzyme preparations are dust free preparations. However, inappropriate handling may cause formation of dust or aerosols. Avoid inappropriate handling which may result in aerosol/dust generation.

Cancer Information:

This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data available.

Chemical Fate Information: No data available.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: N.A.

Disposal Method: Dispose of in accordance with all local, state and federal regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition.

14. TRANSPORT INFORMATION

DOT (Department of Transportation):

Identification Number: UN3082
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS TRIETHANOLAMINE DODECYLBENZENE SULFONATE)
Hazard Class: 9
Packing Group: III
Label Required: Class 9
Reportable Quantity (RQ): 1000# (Triethanolamine dodecylbenzene sulfonate)

Note: This material is not DOT regulated in shipments of less than 17,761#.

15. REGULATORY INFORMATION

TSCA Inventory Status: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA Title III Section 311/312 Category Hazards:

	<u>Immediate (Acute)</u> Yes	<u>Delayed (Chronic)</u> No	<u>Fire Hazard</u> No	<u>Pressure Release</u> No	<u>Reactive</u> No		
Regulated Components:							
Component	CAS	CERCLA	SARA	SARA	U.S.	WI	Prop
	Number	RQ	EHS	313	HAP	HAP	65
Triethanolamine Dodecylbenzene Sulfonate	27323-41-7	Yes	No	No	No	No	No

***Prop 65 - May Contain the Following Trace Components:**

This product may contain a detectable level of (a) chemical(s) subject to California proposition 65.

16. OTHER INFORMATION

Hazard Rating System

Health: 2

Flammability: 0

Reactivity: 0

* = Chronic Health Hazard

NFPA Rating System

Health: 2

Flammability: 0

Reactivity: 0

Special Hazard: None

SDS Abbreviations

N.A. = Not Applicable

N.D. = Not Determined

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

C = Ceiling Limit

N.E./Not Estab. = Not Established

SDS Prepared by: NAO

Reason for Revision: Product formulation change. Change(s) made in Section 9.

Revised: 03-26-2015

Replaces: 08-18-2014

The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.