



# Micro-Zyme HF (AFCO 4423)

## Safety Data Sheet

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

Revision Date: 12/06/2024

Version: 1.3

### SECTION 1: IDENTIFICATION

#### Product Identifier

**Product Form:** Mixture

**Product Name:** Micro-Zyme HF

**Product Code:** AFCO 4423

#### Intended Use of the Product

**Use of the Substance/Mixture:** Liquid enzyme cleaner for cleaning of thin film composite membranes in reverse osmosis, ultra osmosis, and nanofiltration systems.

#### Name, Address, and Telephone of the Responsible Party

##### **Company**

AFCO  
550 Development Avenue  
Chambersburg, PA 17201  
T: 800-345-1329

[www.afcocare.com](http://www.afcocare.com)

#### Emergency Telephone Number

**Emergency Number** : 1-800-424-9300 (CHEMTREC)

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

##### **Classification (GHS-US)**

Skin Irrit. 2 H315

Eye Irrit. 2A H319

Resp. Sens. 1 H334

Aquatic Acute 2 H401

#### Label Elements

##### **GHS-US Labeling**

##### **Hazard Pictograms (GHS-US)**



##### **Signal Word (GHS-US)**

: Danger.

##### **Hazard Statements (GHS-US)**

: H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H401 - Toxic to aquatic life

##### **Precautionary Statements (GHS-US)**

: P261 - Avoid breathing vapors, mist, spray.  
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves, protective clothing, eye protection, face protection.  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321 - Specific treatment (see section 4).  
P332+P313 - If skin irritation occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.  
P362 - Take off contaminated clothing and wash before reuse.

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P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations.

### Other Hazards

**Other Hazards Not Contributing to the Classification:** Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits toxic fumes.

**Unknown Acute Toxicity (GHS-US)** Not available.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### Substances and Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Water	(CAS No) 7732-18-5	50-70	Not classified
1,2-Propylene glycol	(CAS No) 57-55-6	20-30	Not classified
Triethanolamine dodecylbenzenesulfonate	(CAS No) 27323-41-7	5-10	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Subtilisins (proteolytic enzymes)	(CAS No) 9014-01-1	5-10	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 STOT SE 3, H335 Aquatic Acute 1, H400
D-Glucopyranose, oligomeric, decyl octyl glycosides	(CAS No) 68515-73-1	1-5	Eye Dam. 1, H318
Ethanolamine	(CAS No) 141-43-5	1-5	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation: vapour), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 3, H412

Full text of H-phrases: see section 16.

## SECTION 4: FIRST AID MEASURES

### Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). If exposed or concerned: Get medical advice/attention.

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Immediately call a POISON CENTER or doctor/physician.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

### Most Important Symptoms and Effects Both Acute and Delayed

**General:** Causes skin irritation. Causes eye irritation. Inhalation may cause allergic respiratory reaction with asthma-like symptoms and difficulty breathing.

**Inhalation:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Causes eye irritation.

**Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** Not available.

### Indication of Any Immediate Medical Attention and Special Treatment Needed

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If exposed or concerned, get medical advice and attention.

### SECTION 5: FIRE-FIGHTING MEASURES

#### Extinguishing Media

**Suitable Extinguishing Media:** Water spray, fog, carbon dioxide, foam, dry chemical.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** When heated to decomposition, emits toxic fumes.

#### Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Sulfur oxides (SO<sub>x</sub>). Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>).

**Other information:** Do not allow run-off from fire fighting to enter drains or water courses.

#### Reference to Other Sections

Refer to section 9 for flammability properties.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapors, mist, spray).

##### For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

##### For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area.

#### Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

#### Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Absorb and/or contain spill with inert material, then place in suitable container.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely. Do not take up in combustible material such as: saw dust or cellulosic material. Contact competent authorities after a spill.

#### Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

### SECTION 7: HANDLING AND STORAGE

#### Precautions for Safe Handling

**Additional Hazards When Processed:** When heated to decomposition, emits toxic fumes.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

#### Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a well-ventilated place. Keep container tightly closed. Keep/Store away from heat, direct sunlight, extremely high or low temperatures, incompatible materials.

**Incompatible Materials:** Strong oxidizers.

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**Specific End Use(s):** Liquid enzyme cleaner for CIP cleaning of Thin Film Composite membranes in Reverse Osmosis, Ultra Osmosis, and Nanofiltration systems.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control Parameters

1,2-Propylene glycol (57-55-6)		
Ontario	OEL TWA (mg/m <sup>3</sup> )	155 mg/m <sup>3</sup>
Ontario	OEL TWA (ppm)	50 ppm
Subtilisins (proteolytic enzymes) (9014-01-1)		
USA ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	0.00006 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	0.00006 mg/m <sup>3</sup>
Ontario	OEL Ceiling (mg/m <sup>3</sup> )	0.00006 mg/m <sup>3</sup>
Québec	PLAFOND (mg/m <sup>3</sup> )	0.00006 mg/m <sup>3</sup> (Proteolytic enzymes)
Ethanolamine (141-43-5)		
Mexico	OEL TWA (mg/m <sup>3</sup> )	8 mg/m <sup>3</sup>
Mexico	OEL TWA (ppm)	3 ppm
Mexico	OEL STEL (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup>
Mexico	OEL STEL (ppm)	6 ppm
USA ACGIH	ACGIH TWA (ppm)	3 ppm
USA ACGIH	ACGIH STEL (ppm)	6 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	3 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	8 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	3 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (STEL) (ppm)	6 ppm
USA IDLH	US IDLH (ppm)	30 ppm
Ontario	OEL STEL (ppm)	6 ppm
Ontario	OEL TWA (ppm)	3 ppm
Québec	VECD (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup>
Québec	VECD (ppm)	6 ppm
Québec	VEMP (mg/m <sup>3</sup> )	7.5 mg/m <sup>3</sup>
Québec	VEMP (ppm)	3 ppm

#### Exposure Controls

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas. If user operations generate dust, fumes, vapor, spray, or mist, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Personal Protective Equipment:** Protective clothing. Protective goggles. Gloves.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear chemically resistant protective gloves.

**Eye Protection:** Chemical goggles or face shield.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** A respirator is not needed under normal and intended conditions of product use. If workers are exposed to airborne concentrations above the exposure limits, they must use NIOSH certified respirators.

**Thermal Hazard Protection:** Wear suitable protective clothing.

**Other Information:** When using, do not eat, drink or smoke.

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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### Information on Basic Physical and Chemical Properties

Physical State	: Liquid.
Appearance	: Clear, pale yellow to amber
Odor	: Mild.
Odor Threshold	: Not available.
pH	: 10.0-10.5 (1%)
Relative Evaporation Rate (butylacetate=1)	: Not available.
Melting Point	: Not available.
Freezing Point	: Not available.
Boiling Point	: 98.9°C (210.02°F)
Flash Point	: None.
Auto-ignition Temperature	: None.
Decomposition Temperature	: Not available.
Flammability (solid, gas)	: Not available.
Lower Flammable Limit	: Not available.
Upper Flammable Limit	: Not available.
Vapor Pressure	: Not available.
Relative Vapor Density at 20°C	: Not available.
Specific Gravity	: 1.05
Solubility	: Complete.
Partition coefficient: n-octanol/water	: Not available.
Viscosity	: Not available.
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** When heated to decomposition, emits toxic fumes.

**Chemical Stability:** Stable at standard temperature and pressure.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Overheating. Heat. Incompatible materials.

**Incompatible Materials:** Strong oxidizers.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). Thermal decomposition generates: Toxic gases. Sulfur oxides (SO<sub>x</sub>). Nitrogen oxides (NO<sub>x</sub>).

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on Toxicological Effects – Product

**Acute Toxicity:** Not classified.

**LD50 and LC50 Data:** Not available.

**Skin Corrosion/Irritation:** Causes skin irritation. **pH:** 10.0-10.5 (1%)

**Serious Eye Damage/Irritation:** Causes serious eye irritation. **pH:** 10.0-10.5 (1%)

**Respiratory or Skin Sensitization:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Germ Cell Mutagenicity:** Not classified.

**Teratogenicity:** Not available.

**Carcinogenicity:** Not classified.

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified.

**Reproductive Toxicity:** Not classified.

**Specific Target Organ Toxicity (Single Exposure):** Not classified.

**Aspiration Hazard:** Not classified.

**Symptoms/Injuries After Inhalation:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Symptoms/Injuries After Skin Contact:** Causes skin irritation.

**Symptoms/Injuries After Eye Contact:** Causes eye irritation.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

#### Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

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<b>Water (7732-18-5)</b>	
LD50 Oral Rat	>90000 mg/kg
<b>1,2-Propylene glycol (57-55-6)</b>	
LD50 Oral Rat	20000 mg/kg
LD50 Dermal Rabbit	20800 mg/kg
<b>Triethanolamine dodecylbenzenesulfonate (27323-41-7)</b>	
LD50 Oral Rat	2320 mg/kg
<b>Subtilisins (proteolytic enzymes) (9014-01-1)</b>	
LD50 Oral Rat	1.8 g/kg
ATE (oral)	1800.000 mg/kg
<b>Ethanolamine (141-43-5)</b>	
LD50 Oral Rat	1720 mg/kg
LD50 Dermal Rabbit	1 ml/kg

## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

**Ecology - General:** Toxic to aquatic life.

<b>1,2-Propylene glycol (57-55-6)</b>	
LC50 Fish 1	51600 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	10000 mg/l (Exposure time: 24 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 1	19000 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)
LC50 Fish 2	41 (41 - 47) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 2	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
<b>Subtilisins (proteolytic enzymes) (9014-01-1)</b>	
LC50 Fish 1	14.6 mg/l
EC50 Daphnia 1	0.306 mg/l
ErC50 (algae)	0.513 (0.513 - 1.48) mg/l
NOEC chronic fish	2 mg/l
<b>Ethanolamine (141-43-5)</b>	
LC50 Fish 1	227 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	65 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 1	15 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)
LC50 Fish 2	3684 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])

**Persistence and Degradability:** Not available.

### Bioaccumulative Potential

<b>Micro-Zyme HF (AFCO 4423)</b>	
Bioaccumulative Potential	Not established.
<b>1,2-Propylene glycol (57-55-6)</b>	
BCF fish 1	< 1
<b>Ethanolamine (141-43-5)</b>	
Log Pow	-1.91 (at 25°C)

**Mobility in Soil** Not available.

### Other Adverse Effects

**Other Information:** Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Ecology - Waste Materials:** This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

## SECTION 14: TRANSPORT INFORMATION

**14.1 In Accordance with DOT** : Not regulated for transport.

**14.2 In Accordance with IMDG** : Not regulated for transport.

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**14.3 In Accordance with IATA** : Not regulated for transport.

**14.4 In Accordance with TDG** : Not regulated for transport.

## SECTION 15: REGULATORY INFORMATION

### US Federal Regulations

<b>Micro-Zyme HF (AFCO 4423)</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard.
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	
<b>1,2-Propylene glycol (57-55-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	
<b>EPA TSCA Regulatory Flag</b>	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.
<b>D-Glucopyranose, oligomeric, decyl octyl glycosides (68515-73-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	
<b>Triethanolamine dodecylbenzenesulfonate (27323-41-7)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	
<b>Subtilisins (proteolytic enzymes) (9014-01-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	
<b>Ethanolamine (141-43-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	

### US State Regulations

<b>1,2-Propylene glycol (57-55-6)</b>	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) List	
U.S. - Texas - Effects Screening Levels - Long Term	
U.S. - Texas - Effects Screening Levels - Short Term	
<b>D-Glucopyranose, oligomeric, decyl octyl glycosides (68515-73-1)</b>	
U.S. - Texas - Effects Screening Levels - Long Term	
U.S. - Texas - Effects Screening Levels - Short Term	
<b>Triethanolamine dodecylbenzenesulfonate (27323-41-7)</b>	
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances	
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S. - Pennsylvania - RTK (Right to Know) List	
U.S. - Texas - Effects Screening Levels - Long Term	
U.S. - Texas - Effects Screening Levels - Short Term	
<b>Subtilisins (proteolytic enzymes) (9014-01-1)</b>	
U.S. - Texas - Effects Screening Levels - Long Term	
U.S. - Texas - Effects Screening Levels - Short Term	
<b>Ethanolamine (141-43-5)</b>	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - New Jersey - Special Health Hazards Substances List	
U.S. - New York - Occupational Exposure Limits - TWAs	
U.S. - Pennsylvania - RTK (Right to Know) List	
U.S. - Texas - Effects Screening Levels - Long Term	
U.S. - Texas - Effects Screening Levels - Short Term	

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### Canadian Regulations

<b>Water (7732-18-5)</b>
Listed on the Canadian DSL (Domestic Substances List) inventory.
<b>1,2-Propylene glycol (57-55-6)</b>
Listed on the Canadian DSL (Domestic Substances List) inventory.
<b>D-Glucopyranose, oligomeric, decyl octyl glycosides (68515-73-1)</b>
Listed on the Canadian DSL (Domestic Substances List) inventory.
<b>Triethanolamine dodecylbenzenesulfonate (27323-41-7)</b>
Listed on the Canadian DSL (Domestic Substances List) inventory.
<b>Subtilisins (proteolytic enzymes) (9014-01-1)</b>
Listed on the Canadian DSL (Domestic Substances List) inventory.
<b>Ethanolamine (141-43-5)</b>
Listed on the Canadian DSL (Domestic Substances List) inventory.

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

### SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

<b>Revision date</b>	: 12/06/2024
<b>Other Information</b>	: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation: vapour)	Acute toxicity (inhalation: vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 4	Flammable liquids Category 4
Resp. Sens. 1	Respiratory sensitisation Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H227	Combustible liquid
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

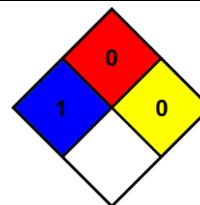


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- NFPA Health Hazard** : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
- NFPA Fire Hazard** : 0 - Materials that will not burn.
- NFPA Reactivity** : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

- Health** : 1 Slight Hazard - Irritation or minor reversible injury possible.
- Flammability** : 0 - Minimal Hazard.
- Physical** : 0 - Minimal Hazard.

### Party Responsible for the Preparation of This Document

AFCO  
550 Development Avenue  
Chambersburg, PA 17201  
T: 800-345-1329

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

North America GHS SDS 2015 (U.S., Can., Mex.)