# HyperClean Boost (AFCO 4308)

Safety Data Sheet

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Revision Date: 01/10/2025 Version: 1.2

## SECTION 1: IDENTIFICATION

### Product Identifier

**Product Form:** Mixture

**Product Name:** HyperClean Boost

**Product Code:** AFCO 4308

### Intended Use of the Product

**Use of the Substance/Mixture:** Oxidizing additive for use prior to caustic wash in CIP cleaning to improve the cleaning of pasteurizers and other heated process equipment. For professional use only.

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

**Company**

AFCO

550 Development Avenue

Chambersburg, PA 17201

T: 800-345-1329

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)**

| | |
|---|---|
| Ox. Liq. 2 | H272 |
| Met. Corr. 1 | H290 |
| Skin Corr. 1B | H314 |
| Eye Dam. 1 | H318 |
| STOT SE 3 | H335 |
| Aquatic Acute 3 | H402 |
| Aquatic Chronic 3 | H412 |

Full text of H-phrases: see section 16.

### Label Elements

**GHS-US Labeling**

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

GHS03 GHS05 GHS07

**Signal Word (GHS-US)** : Danger.

**Hazard Statements (GHS-US)** : H272 - May intensify fire; oxidizer
H290 - May be corrosive to metals
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H335 - May cause respiratory irritation
H402 - Harmful to aquatic life
H412 - Harmful to aquatic life with long lasting effects

**Precautionary Statements (GHS-US)** : P210 - Keep away from extremely high or low temperatures, ignition sources, and incompatible materials. - No smoking.
P220 - Keep/Store away from combustible material, oxidizable materials, and incompatible materials.
P221 - Take any precaution to avoid mixing with combustible material, oxidizable materials, and incompatible materials.
P234 - Keep only in original container.
P260 - Do not breathe vapors, mist, or spray.

P261 - Avoid breathing vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove person 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.
P310 - Immediately call a poison center or doctor.
P312 - Call a poison center or doctor if you feel unwell.
P321 - Specific treatment (see section 4 on this SDS).
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish.
P390 - Absorb spillage to prevent material damage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P406 - Store in corrosive resistant container with a resistant inner liner.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

**Other Hazards**

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

**Unknown Acute Toxicity (GHS-US)** No data available.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Substances**

Not applicable.

**Mixture**

| Name | Product Identifier | % (w/w) | Classification (GHS-US) |
|---|---|---|---|
| Water | (CAS No) 7732-18-5 | 60-70 | Not classified |
| Hydrogen peroxide | (CAS No) 7722-84-1 | 20-30 | Ox. Liq. 1, H271<br>Acute Tox. 4 (Oral), H302<br>Acute Tox. 4 (Inhalation: dust, mist), H332<br>Skin Corr. 1A, H314<br>Eye Dam. 1, H318<br>STOT SE 3, H335<br>Aquatic Acute 3, H402<br>Aquatic Chronic 3, H412 |
| 1-Hydroxyethane-1,1-diphosphonic acid | (CAS No) 2809-21-4 | 1-5 | Met. Corr. 1, H290<br>Acute Tox. 4 (Oral), H302<br>Eye Dam. 1, H318 |
| Acetic acid | (CAS No) 64-19-7 | 1-5 | Flam. Liq. 3, H226<br>Skin Corr. 1A, H314<br>Eye Dam. 1, H318<br>Aquatic Acute 3, H402 |
| Sodium 1-octanesulfonate | (CAS No) 5324-84-5 | 1-5 | Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>STOT SE 3, H335 |
| Nitric acid | (CAS No) 7697-37-2 | 0.1-1 | Ox. Liq. 3, H272<br>Met. Corr. 1, H290<br>Skin Corr. 1A, H314 |

| | | | |
|---|---|---|---|
| | | | Eye Dam. 1, H318 |
| Octanoic acid | (CAS No) 124-07-2 | 0.1-1 | Skin Corr. 1B, H314<br>Eye Dam. 1, H318 |

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).

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Remove contaminated clothing. Immediately flush skin with plenty of water for at several minutes. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain immediate medical attention.

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

**General:** Causes severe skin burns and eye damage. Causes serious eye damage.

**Inhalation:** May cause respiratory irritation.

**Skin Contact:** Causes severe irritation which will progress to chemical burns.

**Eye Contact:** Causes permanent damage to the cornea, iris, or conjunctiva.

**Ingestion:** May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

**Chronic Symptoms:** Not available.

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

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

### Extinguishing Media

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

**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:** May intensify fire; oxidizer.

**Explosion Hazard:** Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

**Reactivity:** Oxidizer: increases the burning rate of combustible materials. May be corrosive to metals. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction. Contact with metals may evolve flammable hydrogen gas. Hydrogen peroxide is a strong oxidizer and decomposes forming oxygen even when inhibited. It will form explosive mixtures with combustible, organic, and other oxidizable materials. Other reactions may occur as a result.

### Advice for Firefighters

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

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

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

**Hazardous Combustion Products:** Oxygen. Carbon oxides (CO, $CO_2$). Nitrogen oxides. Phosphorus oxides.

**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:** Keep away from heat, hot surfaces. No smoking. Keep away from combustible material. Do not get in eyes, on skin, or on clothing. Avoid all contact with skin, eyes, or clothing.

**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. Use only non-sparking tools. As an immediate precautionary measure, isolate spill or leak area in all directions.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material. Absorb spillage to prevent material damage. Cautiously neutralize spilled liquid with soda ash or lime.

### 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:** May cause or intensify fire; oxidizer. May be corrosive to metals.
**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

### Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.
**Storage Conditions:** Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high temperatures and incompatible materials. Store in original container or corrosive resistant and/or lined container.
**Incompatible Materials:** Strong bases, strong oxidizers, alcohols.

### Specific End Use(s)

Oxidizing additive for use prior to the caustic wash in CIP cleaning to improve the cleaning of pasteurizers and other heated process equipment. For professional use only.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

| **Acetic acid (64-19-7)** | | |
|---|---|---|
| Mexico | OEL TWA (mg/m³) | 25 mg/m³ |
| Mexico | OEL TWA (ppm) | 10 ppm |
| Mexico | OEL STEL (mg/m³) | 37 mg/m³ |
| Mexico | OEL STEL (ppm) | 15 ppm |
| USA ACGIH | ACGIH TWA (ppm) | 10 ppm |
| USA ACGIH | ACGIH STEL (ppm) | 15 ppm |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 25 mg/m³ |
| USA OSHA | OSHA PEL (TWA) (ppm) | 10 ppm |
| USA NIOSH | NIOSH REL (TWA) (mg/m³) | 25 mg/m³ |
| USA NIOSH | NIOSH REL (TWA) (ppm) | 10 ppm |
| USA NIOSH | NIOSH REL (STEL) (mg/m³) | 37 mg/m³ |
| USA NIOSH | NIOSH REL (STEL) (ppm) | 15 ppm |
| USA IDLH | US IDLH (ppm) | 50 ppm |
| Ontario | OEL STEL (ppm) | 15 ppm |
| Ontario | OEL TWA (ppm) | 10 ppm |
| Québec | VECD (mg/m³) | 37 mg/m³ |
| Québec | VECD (ppm) | 15 ppm |
| Québec | VEMP (mg/m³) | 25 mg/m³ |
| Québec | VEMP (ppm) | 10 ppm |

| **Hydrogen peroxide (7722-84-1)** | | |
|---|---|---|
| Mexico | OEL TWA (mg/m³) | 1.5 mg/m³ |
| Mexico | OEL TWA (ppm) | 1 ppm |
| Mexico | OEL STEL (mg/m³) | 3 mg/m³ |
| Mexico | OEL STEL (ppm) | 2 ppm |
| USA ACGIH | ACGIH TWA (ppm) | 1 ppm |
| USA ACGIH | ACGIH chemical category | Confirmed Animal Carcinogen with Unknown Relevance to Humans |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 1.4 mg/m³ |
| USA OSHA | OSHA PEL (TWA) (ppm) | 1 ppm |
| USA NIOSH | NIOSH REL (TWA) (mg/m³) | 1.4 mg/m³ |
| USA NIOSH | NIOSH REL (TWA) (ppm) | 1 ppm |
| USA IDLH | US IDLH (ppm) | 75 ppm |
| Ontario | OEL TWA (ppm) | 1 ppm |
| Québec | VEMP (mg/m³) | 1.4 mg/m³ |
| Québec | VEMP (ppm) | 1 ppm |

| **Nitric acid (7697-37-2)** | | |
|---|---|---|
| Mexico | OEL TWA (mg/m³) | 5 mg/m³ |
| Mexico | OEL TWA (ppm) | 2 ppm |
| Mexico | OEL STEL (mg/m³) | 10 mg/m³ |
| Mexico | OEL STEL (ppm) | 4 ppm |
| USA ACGIH | ACGIH TWA (ppm) | 2 ppm |
| USA ACGIH | ACGIH STEL (ppm) | 4 ppm |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 5 mg/m³ |
| USA OSHA | OSHA PEL (TWA) (ppm) | 2 ppm |
| USA NIOSH | NIOSH REL (TWA) (mg/m³) | 5 mg/m³ |
| USA NIOSH | NIOSH REL (TWA) (ppm) | 2 ppm |
| USA NIOSH | NIOSH REL (STEL) (mg/m³) | 10 mg/m³ |
| USA NIOSH | NIOSH REL (STEL) (ppm) | 4 ppm |
| USA IDLH | US IDLH (ppm) | 25 ppm |
| Ontario | OEL STEL (ppm) | 4 ppm |
| Ontario | OEL TWA (ppm) | 2 ppm |
| Québec | VECD (mg/m³) | 10 mg/m³ |
| Québec | VECD (ppm) | 4 ppm |
| Québec | VEMP (mg/m³) | 5.2 mg/m³ |
| Québec | VEMP (ppm) | 2 ppm |

## Exposure Controls

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

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

**Materials for Protective Clothing:** Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing. Corrosion-proof clothing.

**Hand Protection:** Wear protective gloves.

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

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

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

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

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

| | | |
|---|---|---|
| **Physical State** | : | Liquid |
| **Appearance** | : | Clear, colorless |
| **Odor** | : | Vinegar |
| **Odor Threshold** | : | Not available |
| **pH** | : | 2 - 3.5 |
| **Evaporation Rate** | : | Not available |
| **Melting Point** | : | Not available |
| **Freezing Point** | : | Not available |
| **Boiling Point** | : | Not available |
| **Flash Point** | : | 93.3°C (199.94°F) |
| **Auto-ignition Temperature** | : | Not available |
| **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** | : | 1.12 |
| **Solubility** | : | Complete in water. |
| **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:** Oxidizer: increases the burning rate of combustible materials. May be corrosive to metals. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction. Contact with metals may evolve flammable hydrogen gas. Hydrogen peroxide is a strong oxidizer and decomposes forming oxygen even when inhibited. It will form explosive mixtures with combustible, organic, and other oxidizable materials. Other reactions may occur as a result.

**Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

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

**Conditions to Avoid:** Extremely high temperatures, combustible materials, incompatible materials.

**Incompatible Materials:** Strong bases, strong oxidizers, organic materials.

**Hazardous Decomposition Products:** Thermal decomposition generates: Corrosive vapors. oxygen. Carbon oxides (CO, $CO_2$). Nitrogen oxides. Phosphorus oxides.

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects - Product

**Acute Toxicity:** Not classified.

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

**Skin Corrosion/Irritation:** Causes severe skin burns. (**pH:** 2 - 3.5)

**Serious Eye Damage/Irritation:** Causes serious eye damage. (**pH:** 2 - 3.5)

**Respiratory or Skin Sensitization:** Not classified.

**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):** May cause respiratory irritation.

**Aspiration Hazard:** Not classified.

**Symptoms/Injuries After Inhalation:** May cause respiratory irritaiton.

**Symptoms/Injuries After Skin Contact:** Causes severe irritation which will progress to chemical burns.

**Symptoms/Injuries After Eye Contact:** Causes permanent damage to the cornea, iris, or conjunctiva.

**Symptoms/Injuries After Ingestion:** May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

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

**LD50 and LC50 Data:**

| | |
|---|---|
| **Acetic acid (64-19-7)** | |
| LD50 Oral Rat | 3310 mg/kg |
| **1-Hydroxyethane-1,1-diphosphonic acid (2809-21-4)** | |
| LD50 Oral Rat | 1878 mg/kg |
| LD50 Dermal Rabbit | >7940 mg/kg |
| **Octanoic acid (124-07-2)** | |
| LD50 Dermal Rabbit | >2000 mg/kg |
| **Hydrogen peroxide (7722-84-1)** | |
| LD50 Oral Rat | 1193 mg/kg (Species: Sprague-Dawley; Exposure time: 4 h) |
| LD50 Dermal Rat | 4060 mg/kg |
| LD50 Dermal Rabbit | >2000 mg/kg |
| LC50 Inhalation Rat | (Exposure time: 4 h) |
| IARC Group | 3 |
| **Nitric acid (7697-37-2)** | |
| LC50 Inhalation Rat | 67 ppm/4h |

## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

**Ecology - General:** Harmful to aquatic life with long lasting effects.

| | |
|---|---|
| **Acetic acid (64-19-7)** | |
| LC50 Fish 1 | 79 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) |
| EC50 Daphnia 1 | 65 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) |
| LC50 Fish 2 | 75 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static]) |
| **1-Hydroxyethane-1,1-diphosphonic acid (2809-21-4)** | |
| LC50 Fish 1 | 868 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static]) |
| EC50 Daphnia 1 | 527 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| LC50 Fish 2 | 360 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static]) |
| **NOEC (acute)** | 1000 mg/kg (Exposure time: 14 Days - Species: Eisenia foetida [soil dry weight]) |
| **Octanoic acid (124-07-2)** | |
| LC50 Fish 1 | 310 mg/l (Exposure time: 96 h - Species: Oryzias latipes [semi-static]) |
| LC50 Fish 2 | 110 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static]) |
| **Hydrogen peroxide (7722-84-1)** | |
| LC50 Fish 1 | 16.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas) |
| EC50 Daphnia 1 | 18 - 32 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) |
| LC50 Fish 2 | 18 - 56 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static]) |

### Persistence and Degradability

| | |
|---|---|
| **HyperClean Boost (AFCO 4308)** | |
| Persistence and Degradability | May cause long-term adverse effects in the environment. |

### Bioaccumulative Potential

| | |
|---|---|
| **HyperClean Boost (AFCO 4308)** | |
| Bioaccumulative Potential | Not established. |

| | |
|---|---|
| **Acetic acid (64-19-7)** | |
| Log Pow | -0.31 (at 20°C) |
| **1-Hydroxyethane-1,1-diphosphonic acid (2809-21-4)** | |
| BCF Fish 1 | < 50 |
| Log Pow | 3.49 |
| **Octanoic acid (124-07-2)** | |
| Log Pow | 2.92 |
| **Hydrogen peroxide (7722-84-1)** | |
| BCF Fish 1 | (no bioaccumulation) |
| **Nitric acid (7697-37-2)** | |
| Log Pow | -2.3 (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.

**Additional Information:** Container may remain hazardous when empty. Continue to observe all precautions.

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

## SECTION 14: TRANSPORT INFORMATION

### 14.1. In Accordance with DOT

**Proper Shipping Name** : HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS (with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as necessary)

**Hazard Class** : 5.1

**Identification Number** : UN2014

**Label Codes** : 5.1, 8


**Packing Group** : II

**ERG Number** : 140

### 14.2. In Accordance with IMDG

**Proper Shipping Name** : HYDROGEN PEROXIDE, AQUEOUS SOLUTION

**Hazard Class** : 5.1

**Identification Number** : UN2014

**Packing Group** : II

**Label Codes** : 5.1, 8

**EmS-No. (Fire)** : F-H

**EmS-No. (Spillage)** : S-Q


### 14.3. In Accordance with IATA

**Proper Shipping Name** : HYDROGEN PEROXIDE, AQUEOUS SOLUTION

**Packing Group** : II

**Identification Number** : UN2014

**Hazard Class** : 5.1

**Label Codes** : 5.1, 8

**ERG Code (IATA)** : 5C


### 14.4. In Accordance with TDG

**Proper Shipping Name** : HYDROGEN PEROXIDE, AQUEOUS SOLUTION

**Packing Group** : II

**Hazard Class** : 5.1

**Identification Number** : UN2014

**Label Codes** : 5.1, 8

## SECTION 15: REGULATORY INFORMATION

### US Federal Regulations

| **HyperClean Boost (AFCO 4308)** | |
|---|---|
| **SARA Section 311/312 Hazard Classes** | Fire hazard.<br>Immediate (acute) health hazard.<br>Reactive hazard. |
| **Water (7732-18-5)** | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory. | |
| **Acetic acid (64-19-7)** | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory. | |
| **SARA Section 311/312 Hazard Classes** | Fire hazard.<br>Immediate (acute) health hazard. |
| **1-Hydroxyethane-1,1-diphosphonic acid (2809-21-4)** | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory. | |
| **SARA Section 311/312 Hazard Classes** | Immediate (acute) health hazard. |
| **Octanoic acid (124-07-2)** | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory. | |
| **Hydrogen peroxide (7722-84-1)** | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory.<br>Listed on the United States SARA Section 302. | |
| **SARA Section 302 Threshold Planning Quantity (TPQ)** | 1000 (concentration >52%). |
| **Sodium 1-octanesulfonate (5324-84-5)** | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory. | |
| **Nitric acid (7697-37-2)** | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory.<br>Listed on the United States SARA Section 302.<br>Listed on United States SARA Section 313. | |
| **SARA Section 302 Threshold Planning Quantity (TPQ)** | 1000 |
| **SARA Section 313 - Emission Reporting** | 1.0 % |

### US State Regulations

| **Acetic acid (64-19-7)** |
|---|
| U.S. - Louisiana - Reportable Quantity List for Pollutants |
| U.S. - New York - Occupational Exposure Limits - TWAs |
| U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances |
| U.S. - North Carolina - Control of Toxic Air Pollutants |
| RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List |
| RTK - U.S. - Pennsylvania - RTK (Right to Know) List |
| U.S. - Texas - Effects Screening Levels - Long Term |
| U.S. - Texas - Effects Screening Levels - Short Term |
| **1-Hydroxyethane-1,1-diphosphonic acid (2809-21-4)** |
| U.S. - Texas - Effects Screening Levels - Long Term |
| U.S. - Texas - Effects Screening Levels - Short Term |
| **Octanoic acid (124-07-2)** |
| U.S. - Texas - Effects Screening Levels - Long Term |
| U.S. - Texas - Effects Screening Levels - Short Term |
| **Hydrogen peroxide (7722-84-1)** |
| U.S. - New York - Occupational Exposure Limits - TWAs |
| U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances |
| RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List |
| RTK - U.S. - Pennsylvania - RTK (Right to Know) List |

| |
|---|
| U.S. - Tennessee - Occupational Exposure Limits - TWAs |
| U.S. - Texas - Effects Screening Levels - Long Term |
| U.S. - Texas - Effects Screening Levels - Short Term |

| **Nitric acid (7697-37-2)** |
|---|
| U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Acute |
| U.S. - California - SCAQMD - Toxic Air Contaminants With Proposed Risk Values |
| U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728) |
| U.S. - Louisiana - Reportable Quantity List for Pollutants |
| U.S. - New York - Occupational Exposure Limits - TWAs |
| U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances |
| U.S. - North Carolina - Control of Toxic Air Pollutants |
| RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List |
| RTK - U.S. - Pennsylvania - RTK (Right to Know) List |
| U.S. - Texas - Effects Screening Levels - Long Term |
| U.S. - Texas - Effects Screening Levels - Short Term |

### Canadian Regulations

| **Water (7732-18-5)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List). |

| **Acetic acid (64-19-7)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List). |

| **1-Hydroxyethane-1,1-diphosphonic acid (2809-21-4)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List). |

| **Octanoic acid (124-07-2)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List). |

| **Hydrogen peroxide (7722-84-1)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List). |

| **Sodium 1-octanesulfonate (5324-84-5)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List). |

| **Nitric acid (7697-37-2)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List). |

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

**Revision Date** : 01/10/2025

**Other Information** : 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 (Inhalation) | Acute toxicity (inhalation: dust, mist) Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4 |
| Aquatic Acute 3 | Hazardous to the aquatic environment - Acute Hazard Category 3 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment - Chronic Hazard Category 3 |
| Eye Dam. 1 | Serious eye damage/eye irritation Category 1 |
| Flam. Liq. 3 | Flammable liquids Category 3 |
| Met. Corr. 1 | Corrosive to metals Category 1 |
| Ox. Liq. 1 | Oxidizing liquids Category 1 |
| Ox. Liq. 2 | Oxidizing liquids Category 2 |
| Ox. Liq. 3 | Oxidizing liquids Category 3 |
| Skin Corr. 1A | Skin corrosion/irritation Category 1A |
| Skin Corr. 1B | Skin corrosion/irritation Category 1B |

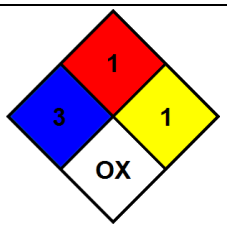
| | |
|---|---|
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H226 | Flammable liquid and vapor |
| H271 | May cause fire or explosion; strong oxidizer |
| H272 | May intensify fire; oxidizer |
| H290 | May be corrosive to metals |
| H302 | Harmful if swallowed |
| H314 | Causes severe skin burns and eye damage |
| H315 | Causes skin irritation |
| H318 | Causes serious eye damage |
| H332 | Harmful if inhaled |
| H335 | May cause respiratory irritation |
| H402 | Harmful to aquatic life |
| H412 | Harmful to aquatic life with long lasting effects |

**NFPA Health Hazard** : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

**NFPA Fire Hazard** : 1 - Must be preheated before ignition can occur.

**NFPA Reactivity** : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.

**NFPA Specific Hazard** : OX - This denotes an oxidizer, a chemical which can greatly increase the rate of combustion/fire.




### HMIS III Rating

**Health** : 3 Serious Hazard - Major injury likely unless prompt action is taken, and medical treatment is given.

**Flammability** : 1 - Slight Hazard.

**Physical** : 1 - Slight Hazard.

### Party Responsible for the Preparation of This Document

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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.)