

## Safety Data Sheet HemaPeroxy Liquid Disinfectant

Document No. M-D6-021

### Section I – Product and Company Identification

**Synonym:** Peroxyacetic Acid Solution, Peracetic Acid Solution

**TPP DIN No.:** 02414937

**Product Code:** HPX25

**Company Identification:**

Chief Medical Supplies Ltd.  
411 – 19 Street, S. E.  
Calgary, AB., Canada.  
T2E 6J7  
1.866.620.6034

**For information, call:**

1-403-207-6034

**Emergency Number:**

1-403-207-6034

**General Use:** HemaPeroxy disinfectant has been formulated for use in the circulation cleaning and sanitizing of equipment such as tanks, pipelines, evaporators, fillers, pasteurizers, and aseptic equipment in dairies, wineries, breweries and beverage plants.

HemaPeroxy disinfectant is for sanitizing of inanimate, non-food contact surfaces (general environmental surfaces).

HemaPeroxy disinfectant is for use in the disinfection of hard surfaces in general commercial and medical environments.

### Section II – Hazards Identification

**Classification:** Oxidizing liquid - Category 3; Corrosive to metals - Category 1; Skin corrosion - Category 1; Serious eye damage - Category 1

**Label Elements:**



**Signal Word:** Danger

**Hazard Statement(s):**

H272 May intensify fire; oxidizer.

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

**Precautionary Statement(s):**

Prevention:

P210 Keep away from heat.

P220 Keep away from clothing and other combustible materials.

P260 Do not breathe dusts or mists.

P264 Wash hands and skin thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Drink a glass of water.

P315 Get immediate medical advice/attention.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P314 Get medical advice/attention if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention.

**Storage:**

Store locked up in a cool, well-ventilated place away from possible contaminants.

Keep container closed when not in use.

**Disposal:**

P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

**Other Hazards**

None known.

**Appearance:** Clear colorless liquid

**Physical State:** Liquid

**Odor:** Sharp, pungent, vinegar-like

**Hazards of Product:** Severely irritating to skin and eyes. Oxidizer: Stabilized peracetic acid, an ingredient in this product, decomposes under fire conditions to release oxygen that intensifies the fire. Use water to keep fire-exposed containers closed.

**Potential Health Hazards**

Liquid and mist are corrosive (causing burns); direct contact could cause irreversible damage to eyes including blindness and/or irreversible destruction of skin tissue. Vapor/mist will irritate nose, throat and lungs but will usually subside when exposure ceases.

**Section III – Composition/Information on Ingredients**

<b>Ingredient Name</b>	<b>CAS No.</b>	<b>Wt. %</b>	<b>EC No.</b>	<b>EC Class</b>
Peroxyacetic Acid	79-21-0	2 – 3	201-186-8	O, C, Xn, N; R7-R10-R20/21/22-R35-R50
Hydrogen Peroxide	7722-84-1	10 – 12	231-765-0	O, C, Xn; R5- R8-R20/22-R35
Acetic Acid	64-19-7	5 – 6	200-580-7	C; R10-35
Water	7732-18-5	83 – 85	231-792-2	Not classified

## Section IV – First Aid Measures

### First Aid Measures:

#### Inhalation

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. Get medical advice or attention if you feel unwell or are concerned.

#### Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. If skin irritation occurs, get medical advice or attention.

#### Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Get medical attention.

#### Ingestion

Rinse mouth with water. Drink a glass of water. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Get immediate medical attention.

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

If inhaled: inhalation of vapours or mists may be irritating to the respiratory system.

If on skin: will cause skin irritation. May cause burns to the skin. Prolonged or repeated exposure to dilutions may cause drying, defatting and dermatitis.

If swallowed: may cause nausea, vomiting and diarrhea.

If in eyes: causes moderate to severe irritation, reddening and swelling of tissue around the eyes. May cause burns depending upon the duration of contact.

#### Immediate Medical Attention and Special Treatment

#### Medical Conditions Aggravated by Exposure

None known.

**Notes to Medical Doctor:** This product can be corrosive to skin, eyes and mucous membranes. Consideration should be given to careful endoscopy as stomach or esophageal burns, perforations or strictures may occur. Careful gastric lavage with an endotracheal tube in place should be considered. Observation may be warranted. Treatment is controlled removal of exposure followed by symptomatic and supportive care.

## Section V – Fire Fighting Measures

#### Conditions of flammability:

Not available

#### Means of extinction:

Use water spray to keep fire exposed containers cool. Extinguish fire using agents suitable for nearby fires.

#### Auto-ignition temperature:

270 °C (518 °F)

#### Hazardous combustion products:

Oxygen that can initiate or promote combustion.

**Fire Fighting Media and Instructions:** Use flooding quantities of water only. Use water spray to keep fire exposed containers cool. Fight fire from protected location or maximum distance. Chemical type extinguishers are not effective with peracetic acid or hydrogen peroxide, which are ingredients in this product. Use proper personal protective equipment and positive pressure self contained breathing apparatus.

**Special Remarks on Fire Hazards:** Not available

**Special Remarks on Explosion Hazards:** Not available

#### Specific Hazards Arising from the Product

Mild oxidizer.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; corrosive sulfur oxides; oxygen.

### **Special Protective Equipment and Precautions for Fire-fighters**

Oxidizer. Prevent contact with flammable and combustible materials.

Firefighters should wear full protective clothing including self-contained breathing apparatus.

## **Section VI – Accidental Release Measures**

**Spill:** Approach release from upwind. Stop or control leak using special protective clothing and positive pressure self-contained breathing apparatus. Control run off and isolate discharged material for proper disposal. Do not allow undiluted material to enter storm or sanitary sewer systems. Combustible materials exposed to hydrogen peroxide, an ingredient in this product, should be immediately submerged in, or rinsed with, large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.

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

Keep out unnecessary and unprotected personnel. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Use appropriate certified respirators when facing concentrations above exposure limit. Remove or isolate incompatible materials as well as other hazardous materials.

### **Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

### **Methods and Materials for Containment and Cleaning Up**

Stop or reduce leak if safe to do so. Dike spilled product to prevent runoff. Contain and soak up spill with absorbent that does not react with spilled product. Do NOT use combustible materials such as sawdust. Place used absorbent into suitable, covered, labelled containers for disposal.

### **Other Information**

Report spills to local health, safety and environmental authorities, as required.

## **Section VII – Handling and Storage**

### **Precautions for Safe Handling**

Avoid breathing in this product. Do not get in eyes, on skin or on clothing. Do not swallow. Wear personal protective equipment to avoid direct contact with this chemical.

Only use where there is adequate ventilation. Keep away from clothing and other combustible materials. Prevent heating.

Keep containers tightly closed when not in use or empty. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system).

**Handling Procedures:** Transfer product from drums to process in closed system (hermetically) and if not possible use effective local exhaust ventilation. Empty drum as thoroughly as possible. Triple rinse before disposal. Avoid contamination; impurities accelerate decomposition. Never return product to original container. Use airless spray to minimize mist generation.

**Storage Requirements:** Do not store near reducing agents, fuels or other non-compatible materials. Store in a cool, dry, well ventilated area. For quality purposes, avoid temperatures above 86° F. Higher temperatures will accelerate decomposition resulting in a loss of assay. Do not store in direct sunlight, or near sources of ignition or heat. Do not double stack. Use first in, first out storage system. Containers must be vented. Expected shelf life - 1 year.

## Section VIII – Exposure Controls/Personal Protection

**Engineering Controls:** Provide mechanical local exhaust ventilation to prevent release of mist into the work area. If ventilation is inadequate or not available use acid gas cartridge or canister with full face-piece. If release is expected, use respiratory protection. Ventilate all transport vehicles prior to unloading.

### Personal Protection

**Eyewear:** Use cup type chemical goggles. Full face shield may be used.

**Gloves:** Rubber or neoprene gloves. Thoroughly wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

**Clothing:** Rubber or neoprene footwear and aprons, or full protective clothing. Hydrogen peroxide is an ingredient in this product; completely submerge hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual hydrogen peroxide, if allowed to dry on materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.

**Respirator:** For normal use as directed, respiratory protection is not required. However, if exposures are anticipated to be above the limits as indicated in the "Exposure Limit" table, an approved full-face acid/gas cartridge or canister respirator should be used. If concentrations are unknown (e.g., significant spill or other emergencies), or if they are anticipated to be above 5 ppm for hydrogen peroxide or 50 ppm for acetic acid, the use of a full-face airline supplied respirator or self-contained breathing apparatus (SCBA) is recommended.

### Exposure Limits:

Chemical Name	ACGIH	OSHA
Hydrogen Peroxide	1 ppm (TWA)	1 ppm (PEL) 1.4 mg/m <sup>3</sup> (PEL)
Acetic Acid	15 ppm (STEL)	10 ppm (PEL) 25 mg/m <sup>3</sup> (PEL)
Sulfuric Acid	2 mg/m <sup>3</sup> (STEL)	1 mg/m <sup>3</sup> (TWA)

## Section IX – Physical and Chemical Properties

**Physical state:** Clear and colourless Liquid

**Odour:** sharp pungent vinegar-like odor

**Specific gravity:** 1.10 @ 20°C (H<sub>2</sub>O = 1)

**Vapour density:** Not available

**Solubility:** Soluble in water

**Boiling point:** About 99 °C (210 °F)

**Flash point and method of determination:**  
Approximately 83 °C (181 °F) (CC)

**pH:** <1

**Coefficient of water/oil distribution:** Not Available

**Critical Temperature:** Not available

**Dispersion Properties:** Not available

**Odour threshold:** Not available

**Vapour pressure:** 22 mm Hg @ 25 °C (77 °F)

**Relative Density (water = 1):** 1.06

**Evaporation rate:** Not available

**Freezing point:** Not available

**Upper flammable limit:** Not available

**Lower flammable limit:** Not available

**pH (1% solution):** 2-3

**Taste:** Not available

**Self-Accelerating Decomposition Temperature (SADT):** > 55°C (55 gallon drum)

## Section X – Stability and Reactivity

**Stability:** Stable (expected shelf life - 1 year, when stored at temperatures below 86°F).

### Reactivity

Not reactive under normal conditions of use.

### Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

**Conditions to avoid:** Open flames, elevated temperatures, any source of heat, combustibles such as paper and wood and contamination. For quality purposes, avoid temperatures above 86°F. Higher temperatures will accelerate decomposition resulting in a loss of assay. Incompatible materials. Contact with combustible materials. Heat.

**Incompatible materials:** Dirt, alkali, reducing agents, organics and heavy metals such as iron, copper, chromium, aluminum, cobalt and caustic. Strong reducing agents (e.g. hydrides), organic materials. Aluminum, zinc.

**Conditions of reactivity:** Not available

**Hazardous decomposition products:** Oxygen that supports combustion and acetic acid. Very toxic carbon monoxide, carbon dioxide; corrosive sulfur oxides; oxygen (a strong oxidizer).

**Polymerization:** Will not occur

## Section XI – Toxicological Information

**Routes of exposure:** Eye contact (severely irritating), skin contact (severely irritating).

**Target Organs:** Eyes, skin, nose, throat, lungs

**Dermal LD<sub>50</sub>:** No data available for the product. 17% Peracetic Acid: > 200 mg/kg (rabbit)

**Oral LD<sub>50</sub>:** 1,922 mg/kg (rat)

**Inhalation LC<sub>50</sub>:** 5% PAA: 4,080 mg/m<sup>3</sup> (4157 ppm) (4 h) (rat) [FMC Study I96-2138] 100% PAA: 204 mg/m<sup>3</sup> (66 ppm) (4 h) (rat)

**Acute effects from overexposure:** Liquid may cause severe burns and irreversible tissue damage to eyes, including blindness. Product contains peracetic acid. Inhalation of peracetic acid vapors causes lacrimation and irritation of the mucous membranes, eyes and nasal passages.

**Chronic effects from overexposure:** No data available for the product. Product contains hydrogen peroxide. The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence for carcinogenicity of hydrogen peroxide in humans, but limited evidence in experimental animals (Group 3 - not classifiable as to its carcinogenicity to humans). The American Conference of Governmental Industrial Hygienists (ACGIH) has concluded that hydrogen peroxide is a 'Confirmed Animal Carcinogen with Unknown Relevance to Humans' (A3).

Persons who are asthmatics may be more sensitive to the effects of inhaled acid sulfates. The International Agency for Research on Cancer (IARC) has concluded that occupational exposure to strong inorganic acid mists containing sulfuric acid are carcinogenic to humans (Group 1). The American Conference of Governmental Industrial Hygienists (ACGIH) has concluded that sulfuric acid, contained in strong inorganic acid mists, is a 'Suspected Human Carcinogen' (A2 - limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals with relevance to humans).

### Carcinogenicity:

Chemical Name	IARC	NTP	OSHA	Other
Hydrogen Peroxide	3	Not listed	Not listed	(ACGIH) A3

## Section XII – Ecological Information

### Ecotoxicity:

96-hour LC<sub>50</sub> = 1.6 mg/L (Rainbow trout) [FMC I95- 2023]

96-hour LC<sub>50</sub> = 1.1 mg/L (Bluegill sunfish) [FMC I95- 2029]

48-hour EC<sub>50</sub> = 0.73 mg/L (Daphnia magna) [FMC I95- 2021]

120-hour EC<sub>50</sub> = 0.18 mg/L (Selenastrum, green algae) [FMC I95- 2027]

**Chemical Fate Information:** No data available for the product. Peracetic acid is completely miscible with water. Aqueous solutions of peracetic acid hydrolyze to acetic acid and hydrogen peroxide.

### Section XIII – Disposal Considerations

**Waste disposal:** Discharge as a hazardous waste into a suitable treatment system in accordance with local, state and federal governmental agencies. Product should not be allowed to enter drains, water courses or the soil. This product and its container should be disposed of in accordance with local, regional, national and international regulations.

### Section XIV – Transport Information

#### DoT

**UN number:** 3149

**UN proper shipping name:** Hydrogen Peroxide and Peroxyacetic Acid Mixtures, Stabilized with Acids, Water and not more than 6% Peroxyacetic Acid.

**Primary hazard class/division:** 5.1

**Hazard class, subsidiary:** 8

**Packing group:** II

**Label(s):** 5.1 Oxidizer and Subsidiary Risk: 8 (Corrosive)

**Placard(s):** Bulk: 5.1 Oxidizer

**Marking(s):** Hydrogen Peroxide and Peroxyacetic Acid Mixtures, Stabilized with Acids, Water and not more than 3% Peroxyacetic Acid, UN 3149.

**Additional information:** Hazardous Substance/RQ: Not applicable 49 STCC Number: Not required - no rail shipments Material is shipped in 5 gal. (45 lb.), 30 gal. (250 lb.) And 55 gal. (495 lb.) vented linear (not cross linked) polyethylene drums and IBCs.

#### IMDG

**Proper Shipping Name:** Hydrogen Peroxide and Peroxyacetic Acid Mixtures, Stabilized with Acids, Water and not more than 3% Peroxyacetic Acid.

#### ICAO/IATA

**Proper shipping name:** Hydrogen Peroxide and Peroxyacetic Acid Mixtures, Stabilized with Acids, Water and not more than 3% Peroxyacetic Acid

**Additional Information:** NOTE: Venting of packages is not permitted for air transport.

**Other Information:** Protect against physical damage. Use proper personal protective equipment and positive pressure selfcontained breathing apparatus when handling spills or leaks. Dike any spills. If this material is ever shipped via vessel, the container requires subsidiary placarding in addition to main hazard class placards.

### Section XV – Regulatory Information

**WHIMIS classification:**

**Product Identification Number:** 9183

**Hazard Classification:** Class D, Div. 2, Subdiv. B. (Toxic), Class E (Corrosive), Class C

**Ingredient Disclosure List:** Listed

**Hazard and risk phrase descriptions:**

EC Symbols:           O (Oxidizer)  
                              C (Corrosive)

Xn (Harmful)  
N (Dangerous for the environment)

EC Risk Phrases: R7 (May cause fire)  
R8 (Contact with combustible material may cause fire)  
R10 (Flammable)  
R20/21/22 (Harmful by inhalation, in contact with skin and if swallowed.)  
R20/22 (Harmful by inhalation and if swallowed.)  
R35 (Causes severe burns.)  
R50 (Very toxic to aquatic organisms.)

## Section XVI – Other Information

### HMIS

Health	3
Flammability	1
Physical Hazard	2
Personal Protection (PPE)	H*

\*Protection H = Safety goggles, gloves, apron, and a vapor respirator

HMIS = Hazardous Materials Identification System

Degree of Hazard Code: 4 = Severe, 3 = Serious, 2 = Moderate, 1 = Slight, 0 = Minimal

### NFPA

Health	3
Flammability	1
Reactivity	2
Special	OX

NFPA (National Fire Protection Association)

Degree of Hazard Code: 4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Insignificant

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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 Chief Medical Supplies 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 Chief Medical Supplies has been advised of the possibility of such damages.

***This product has been classified in accordance with the hazard criteria of the CPR  
and the SDS contains all of the information required by the CPR***