# **Safety Data Sheet**

Issue Date: 02-Mar-2015 Revision Date: 11-Mar-2015 Version 1

# 1. IDENTIFICATION

Product Identifier

**Product Name PEROXIDE** 

Other means of identification

SDS# CTI-054

**UN/ID No** UN2014

Recommended use of the chemical and restrictions on use

Recommended Use Peroxide.

Details of the supplier of the safety data sheet

**Supplier Address** Chemtron Incorporated

7350 C Lockport Place Lorton, Virginia 22079

**Emergency Telephone Number** 

**Company Phone Number** Information: 703-550-7772

**Emergency Telephone (24 hr)** Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

# 2. HAZARDS IDENTIFICATION

Appearance Water white liquid Physical State Liquid Odor Slightly sharp odor

## Classification

Acute toxicity - Inhalation (Vapors)	Category 3
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Oxidizing Liquids	Category 2

# **Hazards Not Otherwise Classified (HNOC)**

May be harmful if swallowed

## Signal Word Danger

## **Hazard Statements**

Toxic if inhaled Causes severe skin burns and eye damage



#### **Precautionary Statements - Prevention**

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

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

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep/Store away from clothing/heat/combustible materials

Take any precaution to avoid mixing with combustibles/heat

## **Precautionary Statements - Response**

Immediately call a poison center or doctor/physician

IF IN EYES: 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

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

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a poison center or doctor/physician

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

Do not induce vomiting

IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

## <u>Precautionary Statements - Storage</u>

Store in a well-ventilated place. Keep container tightly closed

Store locked up

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Other Hazards

Harmful to aquatic life with long lasting effects

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Hydrogen Peroxide	7722-84-1	35

## 4. FIRST-AID MEASURES

#### **First Aid Measures**

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes.

Skin Contact Immediately flush with water for at least 15 minutes. Remove and wash contaminated

clothing before reuse. Call a poison control center or doctor for treatment advice.

**Inhalation** Remove to fresh air. Seek medical attention for further treatment.

**Ingestion** Get medical attention immediately.

#### Most important symptoms and effects

Symptoms Causes severe skin burns and eye damage. Toxic if inhaled. May be harmful if swallowed.

Abdominal pain, stomach upset, nausea, vomiting and diarrhea.

#### Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

#### **Suitable Extinguishing Media**

Carbon dioxide (CO2). Dry chemical. Foam.

Unsuitable Extinguishing Media Not determined.

## **Specific Hazards Arising from the Chemical**

May intensify fire; oxidizer.

**Hazardous Combustion Products** Hazardous decomposition products formed under fire conditions. On decomposition product releases oxygen which may intensify fire.

#### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

## Personal precautions, protective equipment and emergency procedures

Personal Precautions Ventilate affected area.

For Emergency Responders Caution-material is an oxidizer.

**Environmental Precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See

Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

## Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Cover liquid spill with sand, earth or other non-combustible absorbent material. Flush with

plenty of water. Combustible materials exposed to hydrogen peroxide should be rinsed immediately with large amounts of water to ensure that all the hydrogen peroxide is removed. Residual hydrogen peroxide which is allowed to dry on organic materials such as paper, fabrics, cotton, leather, wood, or other combustibles can cause the material to ignite

and result in a fire.

## 7. HANDLING AND STORAGE

## Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Use personal protection recommended in Section 8. Use only outdoors or in a well-ventilated area. Do not breathe vapors. Wash face, hands, and any exposed skin thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep/Store away from clothing/heat/combustible materials.

#### Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep/store

away from clothing/heat/combustible materials. Store away from incompatible materials.

**Incompatible Materials** Acids. Alkalis. Reducing agents. Combustible material. Material decomposes with the

potential to produce a rupture of unvented closed containers. Contact with metals, metal ions, organics, wood, dust, shavings, dry vegetables may cause decomposition.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrogen Peroxide	TWA: 1 ppm	TWA: 1 ppm	IDLH: 75 ppm
7722-84-1		TWA: 1.4 mg/m <sup>3</sup>	TWA: 1 ppm
		(vacated) TWA: 1 ppm	TWA: 1.4 mg/m <sup>3</sup>
		(vacated) TWA: 1.4 mg/m <sup>3</sup>	-

#### Appropriate engineering controls

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits. Ensure

adequate ventilation, especially in confined areas. Eyewash stations. Showers.

# Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Use goggles and/or face shield if splashing is likely.

Skin and Body Protection Wear appropriate chemical resistant clothing. Polyethylene, neoprene, nitrile, polyvinyl

alcohol, natural rubber or butyl rubber gloves.

Respiratory Protection Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure

limits are exceeded. Follow respirator protection program requirements (OSHA 1910.134

and ANSI Z88.2).

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Physical State Liquid

AppearanceWater white liquidOdorSlightly sharp odorColorWater whiteOdor ThresholdNot determined

<u>Property</u> <u>Values</u> <u>Remarks</u> • Method

pH Not determined
Melting Point/Freezing Point -33°C / -27°F
Boiling Point/Boiling Range 108°C / 228°F
Flash Point None

Evaporation Rate Not determined Flammability (Solid, Gas) Liquid-Not Applicable

Upper Flammability LimitsNoneLower Flammability LimitNoneVapor Pressure24 @ 20°C

Vapor Density 1.0

Specific Gravity

1.13 @ 20°C

Water Solubility

Solubility in other solvents

1.13 @ 20°C

Completely soluble

Not determined

Partition Coefficient
Auto-ignition Temperature
Decomposition Temperature
Kinematic Viscosity
Dynamic Viscosity
Explosive Properties
Not determined

# 10. STABILITY AND REACTIVITY

#### Reactivity

Not reactive under normal conditions.

## **Chemical Stability**

Stable under recommended storage conditions.

## **Possibility of Hazardous Reactions**

None under normal processing.

## **Conditions to Avoid**

Contact with incompatible materials. Keep out of reach of children.

#### **Incompatible Materials**

Acids. Alkalis. Reducing agents. Combustible material. Material decomposes with the potential to produce a rupture of unvented closed containers. Contact with metals, metal ions, organics, wood, dust, shavings, dry vegetables may cause decomposition.

#### **Hazardous Decomposition Products**

Hazardous decomposition products formed under fire conditions. When strongly heated, as in a fire, this product may produce oxygen, which may intensify fire in combustible surroundings.

# 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information** 

**Eye Contact** Causes severe eye damage.

**Skin Contact** Causes severe skin burns.

**Inhalation** Toxic if inhaled.

**Ingestion** May be harmful if swallowed.

## Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrogen Peroxide 7722-84-1	= 801 mg/kg ( Rat )	= 2000 mg/kg (Rabbit)	$= 2 \text{ g/m}^3 \text{ (Rat) 4 h}$

## Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

Not classifiable as a human carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrogen Peroxide 7722-84-1	A3	Group 3		

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

#### **Numerical measures of toxicity**

Not determined

# 12. ECOLOGICAL INFORMATION

## **Ecotoxicity**

Harmful to aquatic life with long lasting effects.

# Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Hydrogen Peroxide		16.4: 96 h Pimephales		18 - 32: 48 h Daphnia magna
7722-84-1		promelas mg/L LC50 18 - 56:		mg/L EC50 Static
		96 h Lepomis macrochirus		_
		mg/L LC50 static 10.0 - 32.0:		
		96 h Oncorhynchus mykiss		
		mg/L LC50 static		

## Persistence/Degradability

Not determined.

## **Bioaccumulation**

Not determined.

## **Mobility**

Not determined

#### **Other Adverse Effects**

Not determined

# 13. DISPOSAL CONSIDERATIONS

# **Waste Treatment Methods**

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

## California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Hydrogen Peroxide	Toxic
7722-84-1	Corrosive
	Ignitable
	Reactive

# 14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT

UN/ID No UN2014

Proper Shipping Name Hydrogen peroxide, aqueous solutions

Hazard Class 5.1 Packing Group II

<u>IATA</u>

UN/ID No UN2014

Proper Shipping Name Hydrogen peroxide, aqueous solutions

Hazard Class 5.1 Packing Group II

**IMDG** 

UN/ID No UN2014

Proper Shipping Name Hydrogen peroxide, aqueous solutions

Hazard Class 5.1 Packing Group

Marine Pollutant This material may meet the definition of a marine pollutant

# 15. REGULATORY INFORMATION

## International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Hydrogen Peroxide	Present	Х		Present		Present	Х	Present	Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

## US Federal Regulations

## **CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Hydrogen Peroxide		1000 lb	
7722-84-1			

## **SARA 313**

Not determined

#### **US State Regulations**

## **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

## U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Hydrogen Peroxide	X	X	X
7722-84-1			

## **16. OTHER INFORMATION**

NFPAHealth HazardsFlammabilityInstabilitySpecial HazardsNot determinedNot determinedNot determinedNot determinedHMISHealth HazardsFlammabilityPhysical HazardsPersonal Protection301Not determined

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## Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**