



SAFETY DATA SHEET

Revision Date 01/30/2015

REVISION NUMBER: 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name ENHANCE O2, Hydrogen Peroxide-Based CIP Additive

Other means of identification

Product code 119007

UN/ID No. 2014

Synonyms NONE

Recommended use of the chemical and restrictions on use

Recommended Use No information available.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Rochester Midland Corporation
155 Paragon Drive
Rochester, New York 14624 USA

Emergency telephone number

EMERGENCY TELEPHONE INFOTRAC: 1-800-535-5053
OUTSIDE U.S.: +1-352-323-3500

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

DANGER

Hazard statements

Causes severe skin burns and eye damage



Appearance Clear, Colorless

Physical state Liquid

Odor Pungent

Precautionary Statements - Prevention

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

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: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

No information available

Other Information

- May be harmful if swallowed
- Harmful to aquatic life with long lasting effects
- Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION CAS#	CAS No.	%	TRADE SECRET
Hydrogen Peroxide	7722-84-1	20 - 30	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First aid measures**

General advice Immediately call a POISON CENTER or doctor/physician.

Eye contact 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.

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

Inhalation 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.

Ingestion IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Probable mucosal damage may contraindicate gastric lavage.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water fog, carbon dioxide, foam, dry chemical.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact NONE.

Sensitivity to Static Discharge NONE.

Protective equipment and precautions for firefighters

CORROSIVE MATERIAL. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Increases the combustibility of, and can ignite, many organic materials such as wood, turpentine, etc. Cool exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Wear adequate personal protective equipment, see Section 8, Exposure Controls/Personal Protection.

Environmental precautions

Environmental precautions Keep out of drains, sewers, streams, or other bodies of water. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

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

Methods for cleaning up Dike to contain. Pick up with absorbant material. Put in suitable container for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling DANGER. OXIDIZER. Avoid contact with eyes, skin and clothing. Do not breathe mist or vapors. Keep container closed when not in use. Read and follow label instructions.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in a well ventilated area. Store in a cool, dry location away from incompatible materials.

Incompatible materials Strong alkalies. Reducing agents. Organic matter.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

PRODUCT COMPOSITION CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
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Hydrogen Peroxide 7722-84-1	TWA: 1 ppm (vacated) TWA: 1 ppm (vacated) TWA: 1.4 mg/m ³ TWA: 1 ppm TWA: 1.4 mg/m ³	75 ppm
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Appropriate engineering controls

ENGINEERING CONTROLS General mechanical and/or local exhaust as needed if mist or vapors cause irritation. Showers. Eyewash stations.

Individual protection measures, such as personal protective equipment

Eye/face protection Goggles and face shield are recommended to minimize eye contact.

Skin and body protection Nitrile, neoprene, or other appropriate gloves are recommended to minimize hand skin contact. Appropriate protective clothing as needed to prevent skin contact. It is the responsibility of the end user of this product to determine level of PPE required that is consistent with safe use of this product.

RESPIRATORY PROTECTION Use approved NIOSH respiratory protection if TLV/PEL exceeded or if over exposure is likely.

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	Odor	Pungent
Appearance	Clear, Colorless	Odor threshold	No information available
Color	No information available		
Property	Values	Remarks	• Method
pH	2.4	(10% solution)	
Melting point/freezing point	No information available		
Boiling point / boiling range	114 °C / 235 °F		
Flash point	-	None to boiling.	
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	No information available		
Lower flammability limit:	No information available		
Vapor pressure	No information available		
Vapor density	No information available		
Specific gravity	1.107 - 1.117		
Water solubility	No information available		
Solubility in other solvents	No information available		
Partition coefficient	No information available		
Autoignition temperature	No information available		
Decomposition temperature	No information available		
Kinematic viscosity	No information available		
Dynamic viscosity	No information available		
Explosive properties	No information available		
Oxidizing properties	No information available		

Other Information

Softening point	No information available
VOC (EPA METH.24) (G/L):	0
Density	No information available
Bulk density	9.26

10. STABILITY AND REACTIVITY

REACTIVITY

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

CONDITIONS TO AVOID

Avoid sources of ignition. Concentrated product is a moderate oxidizing agent.

Incompatible materials

Strong alkalies. Reducing agents. Organic matter.

Hazardous Decomposition Products

Oxides of Carbon.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Product Information	Causes severe skin burns and eye damage May be harmful if swallowed
Inhalation	Causes burns.
Eye contact	Corrosive to the eyes and may cause severe damage including blindness.
Skin contact	Causes burns.
Ingestion	Causes burns. May be harmful if swallowed.

PRODUCT COMPOSITION CAS#	Oral LD50	Dermal LD50	Inhalation LC50
Hydrogen Peroxide 7722-84-1	= 801 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	= 2 g/m ³ (Rat) 4 h

Information on toxicological effects

Symptoms	No information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.

PRODUCT COMPOSITION CAS#	ACGIH	IARC	NTP	OSHA
Hydrogen Peroxide 7722-84-1	A3	Group 3	-	-

Reproductive Toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	2762 mg/kg
ATEmix (dermal)	6897 mg/kg
ATEmix (inhalation-dust/mist)	5.2 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

0.85% of the mixture consists of components(s) of unknown hazards to the aquatic environment

PRODUCT COMPOSITION CAS#	Algae/aquatic plants	Fish	Crustacea
Hydrogen Peroxide 7722-84-1	-	16.4: 96 h Pimephales promelas mg/L LC50 10.0 - 32.0: 96 h Oncorhynchus mykiss mg/L LC50 static 18 - 56: 96 h Lepomis macrochirus mg/L LC50 static	18 - 32: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

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 Do not reuse container.

14. TRANSPORT INFORMATION

UN/ID No.
Proper shipping name

2014
HYDROGEN PEROXIDE SOLUTION WITH NOT LESS THAN 20% BUT NOT MORE
THAN 40% HYDROGEN PEROXIDE (STABILIZED AS NECESSARY)

Hazard Class

5.1

Subsidiary class

8

Packing Group

II

Description

5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY.

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not Comply
ENCS	Does not Comply

IECSC	Complies
KECL	Does not Comply
PICCS	Does not Comply
AICS	Does not Comply

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**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

ACUTE HEALTH HAZARD	YES
CHRONIC HEALTH HAZARD	No
FIRE HAZARD	No
Sudden release of pressure hazard	No
REACTIVE HAZARD	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

PRODUCT COMPOSITION CAS#	Hazardous Substances RQs (in LBS)	U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs
Hydrogen Peroxide 7722-84-1	-	1000

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

PRODUCT COMPOSITION CAS#	NJRTK:	MARTK:	PARTK:
Hydrogen Peroxide 7722-84-1		Listed	Listed

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION**NFPA**

Health hazards 3

Flammability 1

Instability 1

Physical and Chemical Properties OX

HMIS

Health hazards 3
Flammability 1
Physical hazards 1
Personal protection H

Prepared By EH&S DEPARTMENT
Revision Date 01/30/2015

Revision Note
Disclaimer

The information provided in this Material 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 SDS ***