

Eyes	Avoid contact with eyes. Risk of serious damage to eyes. Contact with eyes may cause irritation.
Skin	May cause skin irritation and/or dermatitis. Avoid contact with skin. Irritating to skin. May cause inflammation.
Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system. May cause irritation of respiratory tract. May be harmful if inhaled.
Ingestion	Ingestion may cause irritation to mucous membranes. May cause gastrointestinal discomfort if consumed in large amounts. Harmful if swallowed.
Chronic Effects	Avoid repeated exposure. Contains a known or suspected reproductive toxin.
Aggravated Medical Conditions	Preexisting eye disorders, Kidney disorders, Skin disorders, Respiratory disorders, Methemoglobinemia, Blood disorders, Overexposure may cause female and male reproductive disorder(s).
Environmental Hazard	See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Water	7732-18-5	30-60
polyethylene-polypropylene glycol	9003-11-6	15-40
Hydrogen peroxide	7722-84-1	15-40
Glycerin	56-81-5	3-7
Propylene Glycol	57-55-6	1-5
Potassium nitrate	7757-79-1	1-5
Potassium hydroxide	1310-58-3	0.1 - 1
Mentha piperita oil	8006-90-4	0.1 - 1
Eugenol	97-53-0	0.1 - 1
1-Hydroxyethane-1,1-diphosphonic acid	2809-21-4	< 0.1
Iron, bis(D-gluconato-O1,O2)-, dihydrate	12389-15-0	< 0.1

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Immediate medical attention is required.
Skin Contact	Wash skin with soap and water. If skin irritation persists, call a physician.
Inhalation	Move to fresh air in case of accidental inhalation of vapors or decomposition products. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Consult a physician. If large quantities of this material are swallowed, call a physician immediately.
Notes to Physician	Treat symptomatically.
Protection of First-aiders	Use personal protective equipment.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not applicable.
Flash Point	Not applicable.
Suitable Extinguishing Media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.

Uniform Fire Code

- Irritant: Liquid
- Other Health Hazard: Target Organ Toxin--Liquid
- Oxidizer: Class 1--Liquid
- Oxidizer: Class 1--Solid

This product contains a Class 1 Oxidizer as defined by the Uniform Fire Code

Hazardous Combustion Products

Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Aldehydes, On decomposition product releases oxygen which may intensify fire.

Explosion Data

Sensitivity to Mechanical Impact

None.

Sensitivity to Static Discharge

None.

Specific Hazards Arising from the Chemical

Oxidizing agents may form explosive peroxides.

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. Wear self contained breathing apparatus for fire fighting if necessary.

NFPA

Health Hazard 2

Flammability 0

Stability 1

Physical and Chemical Hazards OX

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Use personal protective equipment. Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains.

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up

Cover liquid spill with sand, earth or other noncombustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Dam up.

Other Information

Keep combustibles (wood, paper, oil, etc) away from spilled material.

7. HANDLING AND STORAGE

Handling

Ensure adequate ventilation. Wear personal protective equipment. Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist.

Storage

Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Iron, bis(D-gluconato-O1,O2)-, dihydrate 12389-15-0	TWA: 1 mg/m ³	(vacated) TWA: 1 mg/m ³	TWA: 1 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

Engineering Measures Showers. Eyewash stations. Ventilation systems.

Personal Protective Equipment

Eye/Face Protection

Tightly fitting safety goggles. Face-shield.

Skin and Body Protection

Protective gloves.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear.	Odor	Mint-like.
Odor Threshold	No information available	Physical State	Liquid
pH	7-9	Autoignition Temperature	Not applicable
Flash Point	Not applicable.	Boiling Point/Range	Not applicable
Decomposition Temperature	Not applicable	Explosion Limits	No information available
Melting Point/Range	No information available	Water Solubility	Soluble in water.
Flammability Limits in Air	Not applicable	Evaporation Rate	No information available
Specific Gravity	1.01-1.15	Vapor Density	No data available
Solubility	Insoluble in solvents.	Viscosity	200,000-800,000 cps
Vapor Pressure	No data available		
VOC Content	Not applicable		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions. Decomposes on heating.
Incompatible Products	Strong oxidizing agents. Strong acids. Metals.
Conditions to Avoid	Heat.
Hazardous Decomposition Products	Carbon monoxide (CO). Carbon dioxide (CO ₂). Nitrogen oxides (NO _x). Aldehydes. Oxygen which supports combustion.
Hazardous Polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

Irritation May cause skin and eye irritation.

Inhalation May cause irritation of respiratory tract.

Eye Contact	May cause irreversible damage to eyes.
Skin Contact	Prolonged or repeated contact may dry skin and cause irritation.
Ingestion	Harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrogen peroxide	801 mg/kg (Rat)	2000 mg/kg (Rabbit) 4060 mg/kg (Rat)	2 mg/L (Rat) 4 h
Potassium nitrate	3015 mg/kg (Rat)	-	-
Potassium hydroxide	214 mg/kg (Rat)	-	-
Eugenol	1930 mg/kg (Rat)	-	-

Chronic Toxicity

Chronic Toxicity Avoid repeated exposure. Contains a known or suspected reproductive toxin.

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrogen peroxide	A3			

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

Target Organ Effects Eyes, Blood, Kidney, Respiratory system, Skin, Ingredients of the product create formation of methaemoglobin.

Endocrine Disruptor Information**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Ecotoxicity effects of component substances.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
1-Hydroxyethane-1,1-diphosphonic acid		LC50= 360 mg/L Oncorhynchus mykiss 96 h LC50= 563 mg/L Lepomis macrochirus 96 h		EC50 = 527 mg/L 48 h

Chemical Name	Log Pow
1-Hydroxyethane-1,1-diphosphonic acid	3.49

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated Packaging Do not re-use empty containers. Dispose of in accordance with local regulations.

US EPA Waste Number
D001
U108
U115

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Hydrogen peroxide	Toxic; Corrosive; Ignitable; Reactive
Potassium nitrate	Ignitable; Reactive
Potassium hydroxide	Toxic; Corrosive

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name	Hydrogen peroxide, aqueous solutions
Hazard Class	5.1
Subsidiary Class	8
UN-No	UN2014
Packing Group	II
Description	UN2014,Hydrogen peroxide, aqueous solutions,5.1,(8),,PG II
Emergency Response Guide Number	140

TDG

Proper Shipping Name	Hydrogen peroxide, aqueous solution
Hazard Class	5.1
Subsidiary Class	8
UN-No	UN2014
Packing Group	II
Description	HYDROGEN PEROXIDE, AQUEOUS SOLUTION,5.1,UN2014,PG II

MEX

Proper Shipping Name	Hydrogen peroxide, aqueous solution
Hazard Class	5.1
Subsidiary Class	8
UN-No	UN2014
Packing Group	II
Description	UN2014 Hydrogen peroxide, aqueous solution,5.1,II

ICAO

UN-No	UN2014
Proper Shipping Name	Hydrogen peroxide, aqueous solution
Hazard Class	5.1
Subsidiary Class	8
Packing Group	II
Description	Hydrogen peroxide, aqueous solution,5.1(8),UN2014,PG II

IATA

UN-No	UN2014
Proper Shipping Name	Hydrogen peroxide, aqueous solution
Hazard Class	5.1
Subsidiary Class	8
Packing Group	II
ERG Code	5C
Description	UN2014,Hydrogen peroxide, aqueous solution,5.1(8),PG II

IMDG/IMO

Proper Shipping Name	Hydrogen peroxide, aqueous solution
Hazard Class	5.1
Subsidiary Class	8
UN-No	UN2014
Packing Group	II
EmS No.	F-H, S-Q
Description	UN2014, Hydrogen peroxide, aqueous solution,5.1(8),PG II

RID

Proper Shipping Name	Hydrogen peroxide, aqueous solution
Hazard Class	5.1
UN-No	UN2014
Packing Group	II

14. TRANSPORT INFORMATION

Classification Code	OC1
Description	UN2014 Hydrogen peroxide, aqueous solution,5.1,II,RID
ADR/RID-Labels	5.1 + 8

ADR

Proper Shipping Name	Hydrogen peroxide, aqueous solution
Hazard Class	5.1
UN-No	UN2014
Packing Group	II
Classification Code	OC1
Description	UN2014 Hydrogen peroxide, aqueous solution,5.1,II
ADR/RID-Labels	8

ADN

Proper Shipping Name	Hydrogen peroxide, aqueous solution
Hazard Class	5.1
Packing Group	II
Classification Code	OC1
Description	UN2014 Hydrogen peroxide, aqueous solution,5.1,II
Hazard Labels	5.1 + 8
Limited Quantity	LQ10

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	Does not Comply
EINECS/ELINCS	Does not Comply
ENCS	Does not Comply
IECSC	Does not Comply
KECL	Does not Comply
PICCS	Does not Comply
AICS	Complies

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or 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	Yes

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:.

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):.

U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Hydrogen peroxide	X	X	X		X
Potassium nitrate	X	X	X		X
Potassium hydroxide	X	X	X		X
1-Hydroxyethane-1,1-diphosphonic acid		X			
Iron, bis(D-gluconato-O1,O2)-, dihydrate			X		X

International Regulations**Mexico - Grade**

Moderate risk, Grade 2

Chemical Name	Carcinogen Status	Exposure Limits
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Chemical Name	Carcinogen Status	Exposure Limits
Hydrogen peroxide	A3	Mexico: TWA= 1.5 mg/m ³ Mexico: TWA= 1 ppm Mexico: STEL= 2 ppm Mexico: STEL= 3 mg/m ³
Iron, bis(D-gluconato-O1,O2)-, dihydrate		Mexico: TWA= 1 mg/m ³ Mexico: STEL= 2 mg/m ³

Canada

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

WHMIS Hazard Class

D2B Toxic materials

**Legend**

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Prepared By Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

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Revision Date NOT AUTHORIZED

Revision Note No information available

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text

End of Safety Data Sheet