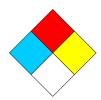
SAFETY DATA SHEET



Larger than 32 fl. oz. (946 mL) All Sizes Up to 32 fl. oz. (946 mL) Container Size:

NFPA

National Fire Protection Association (U.S.A.)









SPECIFIC HAZARD OXIDIZER ACID ALKALI CORROSIVE Use NO WATER RADIATION

Section 1. Identification

Product identifier(s)/

Trademark(s) used on the

label

Other means of identification

Part number

Recommended use and restrictions

Identified uses

: Unelko Corporation Manufacturer/Supplier

14641 N 74th Street Scottsdale, AZ 85260 USA Fax: 1-480-483-7674 Phone: 1-480-991-7272

(8 AM to 5 PM – Monday-Friday – Arizona Time)

Emergency telephone

number (with hours of

operation)

: ChemTel

1-813-248-0585 1-800-255-3924

Section 2. Hazards identification

OSHA/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the EYE IRRITATION - Category 2B substance or mixture (Mild Irritant, Reversible in 7 days.)

GHS label elements

Signal word : Warning

Hazard statements : Causes eye irritation.

Precautionary statements

Prevention : When storing, handling, transferring or repackaging large quantities, wear ear eye or face

protection. Wash hands thoroughly after handling.

: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if Response

present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.



Section 2. Hazards identification

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise : None known.

classified

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification

: Not available.

CAS number/other identifiers

CAS number : Not applicable.

Product code : Not available.

Ingredient name	%	CAS number
Hydrogen peroxide Dimethyloctadecyl[3-(trimethoxysilyl)propyl]ammonium chloride Poly(oxy-1,2-ethanediyl), .alphaundecylomegahydroxy-	1 - 5 1 - 5 0.1 - 1	7722-84-1 27668-52-6 34398-01-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Ave

: Avoid contact with eyes. If in contacted with eyes: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. If irritation persists, get medical attention.

Inhalation

: Avoid breathing vapor or mist. **If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe.

Skin contact

: Avoid contact with skin. If in contacted with skin: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

Ingestion

: Do not ingest. **If ingested:** Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes eye irritation.



Section 4. First aid measures

Inhalation : No known significant effects or critical hazards. Skin contact : No known significant effects or critical hazards. Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

> irritation watering redness

Inhalation : No known significant effects or critical hazards. **Skin contact** : No known significant effects or critical hazards. Ingestion : No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. **Specific treatments** : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

: Decomposition products may include the following materials:

Unsuitable extinguishing

media

: None known.

Specific hazards arising

from the chemical **Hazardous thermal**

decomposition products

: No specific fire or explosion hazard.

carbon dioxide carbon monoxide nitrogen oxides

halogenated compounds metal oxide/oxides

Special protective actions

for fire-fighters

Special protective equipment for fire-fighters : No special protection is required.

Fire-fighters should wear appropriate protective equipment and self-contained breathing

apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-

emergency personnel".



Section 6. Accidental release measures

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits	
Hydrogen peroxide	ACGIH TLV (United States, 3/2012). TWA: 1.4 mg/m³ 8 hours. TWA: 1 ppm 8 hours. NIOSH REL (United States, 6/2009). TWA: 1.4 mg/m³ 10 hours. TWA: 1 ppm 10 hours. OSHA PEL (United States, 6/2010). TWA: 1.4 mg/m³ 8 hours. TWA: 1 ppm 8 hours.	

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.



Section 8. Exposure controls/personal protection

Individual protection measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before

eating, smoking and using the lavatory and at the end of the working period. Ensure

that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: None required.

Skin protection

Hand protection : None required.

Body protection : None required.

Other skin protection : None required.

Respiratory protection : None required.

Section 9. Physical and chemical properties

<u>Appearance</u>

Physical state : Liquid.

Color : Clear to slightly cloudy.

Odor : Mint.

Odor threshold : Not applicable.

pH : 5 [Conc. (% w/w): 1%]

Melting point : Not applicable.

Boiling point : 100°C (212°F)

Flash point : Non-flammable.

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : 1 (Water = 1)

Flammability (solid, gas) : Non-flammable.

Lower and upper explosive

(flammable) limits

: Not applicable.

Vapor pressure : Not applicable.
Vapor density : Not applicable.

Relative density : 1

Solubility in water : Soluble.

Partition coefficient: n- : Not available.

octanol/water

Auto-ignition temperature : Not applicable.

Decomposition temperature : Not available.

SADT : Not available.

Viscosity : Water.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.



Section 10. Stability and reactivity

Conditions to avoid : No specific data.

Incompatible materials : Extremely reactive or incompatible with the following materials: reducing materials,

combustible materials, organic materials and metals.

Reactive or incompatible with the following materials: oxidizing materials and acids.

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Dimethyloctadecyl[3-(trimethoxysilyl) propyl]ammonium chloride	LC50 Inhalation Vapor	Rat	112 mg/m³	4 hours
	LD50 Oral	Rat	9910 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hydrogen peroxide Dimethyloctadecyl[3-(trimethoxysilyl) propyl]ammonium chloride	Eyes - Severe irritant Skin - Mild irritant	Rabbit Rabbit	-	1 mg -	-
	Eyes - Mild irritant	Rabbit	-	-	-

Sensitization

There is no applicable data.

Mutagenicity

There is no applicable data.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	ACGIH	NTP
Hydrogen peroxide	-	3	A3	-

Reproductive toxicity

There is no applicable data.

Teratogenicity

There is no applicable data.

Specific target organ toxicity (single exposure)

Name	3 3 3	Route of exposure	Target organs
Hydrogen peroxide	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

There is no applicable data.

Aspiration hazard

There is no applicable data.



Section 11. Toxicological information

Information on the likely routes of exposure

: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes eye irritation.

Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

irritation watering redness

Inhalation : No known significant effects or critical hazards.
 Skin contact : No known significant effects or critical hazards.
 Ingestion : No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : No known significant effects or critical hazards.

effects

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate : No known significant effects or critical hazards.

effects

Potential delayed effects: No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral Inhalation (vapors)	8333.3 mg/kg 220 mg/L



Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Hydrogen peroxide	Acute EC50 1.2 mg/L Marine water	Algae - Dunaliella tertiolecta - Exponential growth phase	72 hours
	Acute EC50 5.38 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 2320 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 26.7 ppm Fresh water	Fish - Lepomis macrochirus - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
Poly(oxy-1,2-ethanediyl), .alpha undecylomegahydroxy-	Acute EC50 6700 μg/l Fresh water	Daphnia - Daphnia magna	48 hours
anassy, remegal rijuloky	Acute LC50 7100 μg/l Fresh water	Fish - Pimephales promelas	96 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Hydrogen peroxide	-1.36	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: There is no data available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
Additional information			
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-



Section 14. Transport information

Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in the

event of an accident or spillage.

Transport in bulk according : Not available.

to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)**

: Not listed

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances

: Not listed

DEA List I Chemicals

(Precursor Chemicals)

: Not listed

DEA List II Chemicals

: Not listed

(Essential Chemicals)

SARA 302/304

Composition/information on ingredients

			SARA 302 TPQ		SARA 304 RQ	
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
Hydrogen peroxide	1 - 5	Yes.	-	-	-	-

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients



Section 15. Regulatory information

Name	%	hazard	Sudden release of pressure		Immediate (acute) health hazard	Delayed (chronic) health hazard
Hydrogen peroxide	1 - 5 1 - 5	Yes. No.	No.	Yes. No.	Yes. Yes.	No. No.
Dimethyloctadecyl[3-(trimethoxysilyl)propyl] ammonium chloride Poly(oxy-1,2-ethanediyl), .alphaundecylomegahydroxy-		No.	No.	No.	Yes.	No.

State regulations

Massachusetts : The following components are listed: Hydrogen peroxide **New York** : The following components are listed: Hydrogen peroxide

New Jersey : The following components are listed: 1,2-Propanediol; Hydrogen peroxide **Pennsylvania** : The following components are listed: 1,2-Propanediol; Hydrogen peroxide

California Prop. 65

No products were found. **International regulations**

International lists : Australia inventory (AICS): All components are listed or exempted. **China inventory (IECSC)**: All components are listed or exempted.

Japan inventory: Not determined.

Korea inventory: All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Taiwan inventory (CSNN): Not determined.

Chemical Weapons

Convention List Schedule I

Chemicals

Chemical Weapons

Convention List Schedule

II Chemicals

Chemical Weapons

Convention List Schedule

III Chemicals

: Not listed

: Not listed

: Not listed

Section 16. Other information

History

References

: 15/06/2013 **Date of issue Date of previous issue** : Not applicable.

Version

: Not applicable. Revised Section(s)

Original SDS Prepared By

: KMK Regulatory Services Inc.

: Guide to The Globally Harmonized System of Classification and Labeling of Chemicals

(GHS): http://www.osha.gov/dsg/hazcom/ghs.html

Modification of the Hazard Communication Standard (HCS) to conform with the United Nations' (UN) Globally Harmonized System of Classification and Labeling of Chemicals

(GHS): http://www.osha.gov/dsg/hazcom/hazcom-faq.html



Section 16. Other information

Key to abbreviations

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.