

SECTION 1 - IDENTIFICATION

Product Identifier: Meras 1016SC

Product Use: Closed Loop Treatment

Common Names: Name

Meras Water Solutions
4213 Technology Dr Suite A, E3-725
Modesto, CA 95356
USA
(866)899-9762
info@meras.com

24 Hr. Emergency #: ChemTrec (800) 424-9300

SECTION 2 - HAZARDS IDENTIFICATION

Classification of the Substance or Mixture:

Skin Corrosion – Category 1
Serious Eye Damage – Category 1
Oxidizing Liquids – Category 2
Corrosive to Metals – Category 1
Organic Peroxides – Type G
Acute Toxicity – Oral Category 4
Acute Toxicity – Dermal Category 5
Hazardous to Aquatic Environment, Acute Toxicity – Category 2



Signal Word: DANGER

Hazard Statement(s):

H314: Causes severe skin burns and eye damage.
H272: May intensify fire; oxidizer.
H290: May be corrosive to metals.
H302: Harmful if swallowed.
H335: May cause respiratory irritation.
H412: Toxic to aquatic life.

Precautionary Statements:

Prevention-

P262: Do not get in eyes, on skin, or on clothing.
P264: Wash skin thoroughly after handling.
P270: Do not eat, drink, or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P221: Take any precaution to avoid mixing with combustibles.

Response-

P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P321: Specific treatment (see supplementary first aid instructions on this label).
P362: Take off contaminated clothing and wash before reuse.

Storage-

P403+233: Store in a well ventilated place. Keep container tightly closed.
P405: Store locked up.
P234: Keep only in original container.

Disposal-

P501: Dispose of contents/container to an approved waste disposal plant.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient(s)	CAS No.	Concentration (%)
Hydrogen Peroxide	7722-84-1	25-27.4%
Acetic Acid	64-19-7	3-8%
Peroxyacetic Acid	79-21-0	5-5.9%

SECTION 4 - FIRST-AID MEASURES

Inhalation:	Remove source of exposure or move person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor. Symptoms of pulmonary edema can be delayed up to 48 hours after exposure. If direct contact during rescue breathing poses a threat to the first aid provider, "Avoid mouth-to-mouth contact by using a barrier device."
Skin Contact:	Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse skin with lukewarm, gently flowing water/shower with a flushing duration of 30 minutes. Immediately call POISON CENTER/doctor. Wash contaminated clothing before re-use.
Eye Contact:	Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 30 minutes. Take care not to rinse contaminated water into the unaffected eye or into the face. Immediately call a POISON CENTER/doctor.
Ingestion:	Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.
Most Important Symptoms And Effects, Both Acute And Delayed:	Causes severe skin burns and eye damage, burning of the mouth, throat, and esophagus.
Indication Of Any Immediate Medical Attention And Special Treatment Needed:	Treat symptomatically.

SECTION 5 - FIRE-FIGHTING MEASURES

Suitable Extinguishing Equipment:	Water Spray Water Fog Carbon Dioxide Alcohol-Resistant Foam Dry Chemical
Special Hazards Arising From The Substance Or Mixture:	Non-combustible. May give off irritating or toxic fumes (or gases) in a fire. Hazardous Combustion Products: May cause fire and explosions when in contact with incompatible materials.
Special Protective Equipment And Precautions For Firefighters:	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus. Use caution. See Section 7 for more information on safe handling. See Section 8 for more information on personal protection equipment. See Section 13 for disposal information.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, And Emergency Procedures:	Keep from contacting skin or eyes. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Stay upwind of spilled material. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.
Environmental Precautions:	Prevent further release (leakage/spillage) if safe to do so. Run off from fire control or dilution water may cause pollution. Keep out of drains, municipal sewers, open bodies of water, and water course.

Methods And Materials For Containments And Cleaning Up:

SMALL SPILLS (less than 1 gallon): Neutralize with soda ash or cover with dry earth, sand or other non-combustible material, place into loosely covered plastic containers for later disposal. If neutralized, material can be diluted into drain. LARGE SPILL: Restrict access to area until completion of clean up. Prevent liquid from entering sewers or waterways. Stop or reduce leak if safe to do so. Dike with inert material (sand, earth, etc.). Collect into plastic containers for disposal. Ensure adequate decontamination of tools and equipment following clean up.

Reference To Other Sections:

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment. See Section 13 for information on proper disposal.

SECTION 7 - HANDLING AND STORAGE

Handling Precautions:

Avoid contact with eyes, skin, and/or clothing.
Use approved containers only.
Do not expose containers to open flame, excessive heat, or direct sunlight.
Do not puncture or drop containers.
Handle with care and avoid spillage on the floor.
Keep material out of reach of children.
Keep material away from incompatible materials.
Wash thoroughly after handling.
Do not contaminate water, food, or feed by storage or disposal.

Storage Requirements:

Keep container tightly closed. Store in a well-ventilated, cool, dry place. Do not store in direct sunlight.

Incompatible Materials:

Avoid strong reducing agents, soft metals, heat and bases (unless product has been diluted to less than 1000ppm, then bases may be used to gradually adjust to a pH of less than 9).

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

Component(s)	CAS No.	OSHA			NIOSH		ACGIH	
		PEL	Ceiling	STEL	REL	Ceiling	TLV	Ceiling
Hydrogen Peroxide	7722-84-1	1 ppm 1.4 mg/m ³	N/A	N/A	1 ppm 1.4 mg/m ³	N/A	1 ppm 1.4 mg/m ³	N/A
Acetic Acid	64-19-7	10 ppm 25 mg/m ³	400 ppm	15 ppm 37 mg/m ³	10 ppm 25 mg/m ³	N/A	10 ppm 25 mg/m ³	N/A
Peroxyacetic Acid	79-21-0	N/A	N/A	N/A	N/A	N/A	0.4 ppm	N/A

Engineering Controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94).
Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Personal Protective Equipment:

All safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Type of protective equipment should be selected based on concentration amount and conditions of use of this material. Full-face vapor respirator may be required as backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds. Respiratory protection must comply with 29 CFR 1910.134.

Eye/Face-

- Safety glasses or goggles (chemical-resistant).
- Face shield if splashing hazard exists.

Skin/Body-

- Gloves (PVC, neoprene, or nitrile).
- Chemical resistant garments (may be washed and reused if necessary).

Respiratory-

- In case of confined spaces or high levels encountered in the air, wear self-contained breathing apparatus.

General Hygiene Considerations-

- Handle in accordance with good industrial hygiene and safety practice.
- Keep away from foodstuffs, beverages, and feed.
- Wash face, hands, and any exposed skin thoroughly after handling.
- Avoid contact with eyes, skin, and clothing.
- Do not smoke near the container.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid	Vapor Pressure (Mm Hg): 22 mm Hg
Color: Colorless	Vapor Density: No information available.
Odor: Vinegar odor	Relative Density: 9.34 lbs/gal
pH: <1	Specific Gravity: 1.12
Melting/Freezing Point: 32.0 °F	Solubility in Water: 100%
Initial Boiling Point and Boiling Range: 212.0 °F	Partition Coefficient (N-Octanol/Water): No information available.
Flash Point: >200°F	Auto Ignition Temperature: >518°F
Evaporation Rate: No information available.	Decomposition Temperature: No information available.
Flammability (Solid, Gas): Nom flammable.	Viscosity: 5-15 cSt at 68°F
Upper/Lower Flammability or Explosive Limits: No information available.	Volatiles (% By Weight): >99
	Volatile Organic Compounds (VOC's): No information available.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Not reactive under normal and ambient conditions.
Chemical Stability: Stable for up to 1 year under normal and ambient conditions.
Possibility of Hazardous Reactions: May react with incompatible materials.
Conditions to Avoid: Incompatibilities, flames, ignition sources, high temperatures.
Incompatible Materials: Reactive with bases, metals, reducing agents, and combustible materials.
Hazardous Decomposition Products: Oxygen, which supports combustion.

SECTION 11 - TOXICOLOGICAL INFORMATION

Routes of Entry:	Eyes, skin, ingestion, inhalation.
Acute Toxicity:	
Oral Toxicity (LD ₅₀)-	668 mg/kg
Dermal Toxicity (LD ₅₀)-	4,808 mg/kg (Rabbit)
Inhalation Toxicity (LD ₅₀)-	>20 mg/L (20,000 ppm)
Primary Eye Irritation:	Corrosive.
Primary Skin Irritation:	Corrosive.
Sensitization:	No data available.
Carcinogenicity:	
IARC-	Group 3
ACGIH-	No component of this product present at levels >=0.1% is identified as a carcinogen or potential carcinogen.
NTP-	No component of this product present at levels >=0.1% is identified as a carcinogen or potential carcinogen.
OSHA-	No component of this product present at levels >= 0.1% is identified as a carcinogen or potential carcinogen.
Reproductive Toxicity:	No data available.
Specific Target Organ Toxicity-Single Exposure:	No data available.
Specific Target Organ Toxicity-Repeated Exposure:	No data available.
Aspiration Hazard:	No data available.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	
Toxicity to Fish-	No data available.
Toxicity to Daphnia and Other Aquatic Invertebrates-	No data available.

Persistence and Degradability:	Not expected to persist. Expected to readily biodegrade.
Bioaccumulation Potential:	Not expected to bio accumulate.
Mobility in Soil:	No data available.
Results of PBT and vPvB Assessment:	Not conducted.
Other Adverse Effects:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

SECTION 13 - DISPOSAL CONSIDERATIONS

Recommendation:	Hazardous wastes shall be managed responsibly. Contact a licensed professional waste disposal service to dispose of this material. Do not allow product to reach the sewage system. Disposal must comply will local, state, and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of an NPDES permit.
Cleansing agent:	Water should be used as a cleansing agent to rinse containers and/or soiled PPE.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT

UN Number: 3098
Class: 5.1 (8)
Packing Group: II
Proper Shipping Name: Oxidizing liquid, Corrosive, n.o.s. (Hydrogen peroxide and peroxyacetic acid mixtures, stabilized with acids, water and <=6 percent peroxyacetic acid)
Marine Pollutant: No



IMDG

UN Number: 3098
Class: 5.1 (8)
Packing Group: II
EMS-No.:
Proper Shipping Name: Oxidizing liquid, Corrosive, n.o.s. (Hydrogen peroxide and peroxyacetic acid mixtures, stabilized with acids, water and <=6 percent peroxyacetic acid)



IATA

UN Number: 3098
Class: 5.1 (8)
Packing Group: II
Proper Shipping Name: Oxidizing liquid, Corrosive, n.o.s. (Hydrogen peroxide and peroxyacetic acid mixtures, stabilized with acids, water and <=6 percent peroxyacetic acid)



SECTION 15 - REGULATORY INFORMATION

EPA Registration No.:

Cal DPR Registration No.:

<u>Listed Hazardous Chemical</u>	<u>CAS No.</u>	<u>EPCRA EHS</u>		<u>CERCLA HS</u>	<u>CAA 112r</u>	<u>EPCRA 313</u>	<u>Prop 65 Listed</u>
		<u>RQ (lbs)</u>	<u>TPQ (lbs)</u>	<u>RQ (lbs)</u>	<u>TQ (lbs)</u>		
Acetic Acid	64-19-7	N/A	N/A	5,000	N/A	N/A	N/A
Peracetic Acid	79-21-0	500	500	N/A	10,000	Yes	N/A

Legend

EPCRA- Emergency Planning and Community Right-to-Know Act
 CERCLA- Comprehensive Environmental Response, Compensation and Liability Act
 CAA- Clean Air Act
 RQ- Release Quantity
 TPQ- Threshold Planning Quantity
 EPA- Environmental Protection Agency
 DPR- Department of Pesticide Registration

SECTION 16 - OTHER INFORMATION

NFPA



NFPA Rating Explanation Guide					
RATING NUMBER	HEALTH HAZARD	FLAMMABILITY HAZARD	INSTABILITY HAZARD	RATING SYMBOL	SPECIAL HAZARD
4	Can be lethal	Will vaporize and readily burn at normal temperatures	May explode at normal temperatures and pressures	ALK	Alkaline
3	Can cause serious or permanent injury	Can be ignited under almost all ambient temperatures	May explode at high temperature or shock	ACID	Acidic
2	Can cause temporary incapacitation or residual injury	Must be heated or high ambient temperature to burn	Violent chemical change at high temperatures or pressures	COR	Corrosive
1	Can cause significant irritation	Must be preheated before ignition can occur	Normally stable. High temperatures make unstable	OX	Oxidizing
0	No hazard	Will not burn	Stable	☢	Radioactive
				☹	Reacts violently or explosively with water
				☹OX	Reacts violently or explosively with water and oxidizing

HMIS III

2 HEALTH

0 FLAMMABILITY

2 REACTIVITY

D PERSONAL PROTECTION

PERSONAL PROTECTION INDEX					
A	☒			G	☒ + ☐ + ☹
B	☒ + ☐			H	☒ + ☐ + ☹ + ☹
C	☒ + ☐ + ☹			I	☒ + ☐ + ☹
D	☒ + ☐ + ☹ + ☹			J	☒ + ☐ + ☹ + ☹ + ☹
E	☒ + ☐ + ☹ + ☹			K	☒ + ☐ + ☹ + ☹ + ☹
F	☒ + ☐ + ☹ + ☹ + ☹			X	Consult your supervisor or S.O.P. for "SPECIAL" handling directions
A	n	o	p	q	r
Safety Glasses	Splash Goggles	Face Shield & Eye Protection	Gloves	Boots	Synthetic Apron
t	u	w	y	z	Additional Information
Dust Respirator	Vapor Respirator	Dust & Vapor Respirator	Full Face Respirator	Airline Hood or Mask	

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