SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product Identifier: PERASAN MP-2C Product Code: 844

Product Use: FDA uses.

Chemical Family: Oxidizer

Dilution Information: 0.012%-0.39% (v/v)

Enviro Tech Chemical Services, Inc.

500 Winmoore Way Modesto, CA 95358

(209) 581-9576 (7 AM to 5 PM, PST, Monday to Friday)

24 Hr. Emergency Tel.#: 800-255-3924

SECTION 2 - HAZARDS IDENTIFICATION

Classification of the Product AS SOLD:

Skin Corrosion - Category 1 Serious Eye Damage - Category 1 Oxidizing Liquids - Category 2 Corrosive to Metals - Category 1 Organic Peroxides - Type F Acute Toxicity - Oral Category 4 Acute Toxicity - Dermal Category 4

Hazardous to the Aquatic Environment, Acute Toxicity Category 2



GHS label elements for Product AS SOLD

Signal Word: DANGER

Hazard Statements:

Causes severe skin burns and eye damage

May intensify fire; oxidizer May be corrosive to metals

Heating may cause fire

Harmful if swallowed

Harmful in contact with skin

Toxic to aquatic life

Precautionary Statements:

Prevention

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

Wash hands thoroughly after handling

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

Keep/Store away from clothing/combustible materials.

Do not eat, drink or smoke when using this product.

Keep only in original container.

Take any precaution to avoid mixing with combustibles.

Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a POISON CENTER or doctor/physician if you feel unwell.

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.

For specific treatment see Section 4 First Aid.

Wash contaminated clothing before reuse.

In case of fire: Use dry sand, dry chemical, or alcohol resistant foam for extinction.

Absorb spillage to prevent material damage.

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Storage

It is recommended to store this product at temperatures where the bulk liquid will not exceed $86^{\circ}F$ / $30^{\circ}C$. Keep cool. Store away from other materials. Protect from sunlight.

Store locked up. Store in a corrosive resistant container with a resistant inner liner.

Disposal

Dispose of contents/container in accordance with local regulations.

Hazards not Otherwise Classified:

No other hazards classified.

Classification of the Product AT USE DILUTION:

Acute Toxicity - Oral Category 5

GHS label elements for Product AT USE DILUTION

Signal Word: NONE

Hazard Pictograms: NONE

Hazard Statements:

May be harmful if swallowed

Precautionary Statements:

Prevention

Wash hands thoroughly after handling

Do not eat, drink or smoke when using this product.

Response

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

Disposal

Dispose of contents/container in accordance with local regulations.

Hazards not Otherwise Classified:

No other hazards classified.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Product AS SOLD

Ingredient	Synonym	CAS Number	Concentration
HYDROGEN PEROXIDE	H2O2	7722-84-1	4.0-6.0%
ACETIC ACID	NONE	64-19-7	40-50%
PEROXYACETIC ACID	PAA	79-21-0	21.5-25.5%

Product AT USE DILUTION

Ingredient	Synonym	CAS Number	Concentration
HYDROGEN PEROXIDE	H2O2	7722-84-1	0.0006-0.02%
PEROXYACETIC ACID	PAA	79-21-0	0.003-0.10%

SECTION 4 - FIRST-AID MEASURES

Product AS SOLD

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

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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: 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.

Product AT USE DILUTION:

Inhalation: Seek medical attention if symptoms occur.

Skin Contact: Rinse with plenty of water. **Eye Contact:** Rinse with plenty of water.

Ingestion: Rinse mouth. Immediately call a poison center/doctor if symptoms occur.

Most Important Symptoms and Effects, both Acute and Delayed: Irritation of the gastrointestinal tract. Indication of any Immediate Medical Attention and Special Treatment Needed: Treat symptomatically

SECTION 5 - FIRE-FIGHTING MEASURES

Product AS SOLD:

Extinguishing Media: Dry powder, foam, carbon dioxide, water spray, sand. Do NOT use heavy water stream

Special hazards arising from the substance or mixture: Non combustible. May give off irritating or toxic fumes (or gases) in a fire.

Flammability classification (OSHA 29 CFR 1910.106) (Hazcom 2012): Non flammable

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.

Product AT USE DILUTION:

Extinguishing Media: Material is not flammable.

Special hazards arising from the substance or mixture: No special hazards known.

Flammability classification (OSHA 29 CFR 1910.106) (Hazcom 2012): Non flammable

Hazardous Combustion Products: None known.

Special protective equipment and precautions for firefighters: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Product AS SOLD:

Personal precautions, protective equipment and emergency procedures: Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Methods and materials for containment 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.

Special spill response procedures: Collect spills in plastic containers only. Prevent from entering sewers, waterways, or low areas.

Product AT USE DILUTION:

Personal precautions, protective equipment and emergency procedures: Wear appropriate personal protective

equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Methods and materials for containment and cleaning up: SMALL SPILLS (less than 1 gallon): Dike small spills with inert material (sand, earth, etc.). Collect in plastic containers only. Wash area and let dry. LARGE SPILL: Should be diked with sand ahead of spill. Collect in plastic containers only. Ensure adequate decontamination of tools and equipment following clean up.

Special spill response procedures: Collect spills in plastic containers only. Prevent from entering sewers, waterways, or low areas.

SECTION 7 - HANDLING AND STORAGE

Product AS SOLD:

Precautions for Safe Handling: Wear at least chemical resistant gloves and eye protection, face shield, and chemical resistant garments when handling, moving or using this product. Do not contaminate water, food, or feed by storage or disposal.

Conditions for Safe Storage: It is recommended to store this product at temperatures where the bulk liquid will not exceed 86°F / 30°C. Store in a cool, dry, well ventilated place away from direct sunlight. Keep container closed when not in use.

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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 then 9).

Product AT USE DILUTION:

Precautions for Safe Handling: Do not swallow or ingest. Wash hands thoroughly after handling.

Conditions for Safe Storage: Store in a cool, dry, well ventilated place away from direct sunlight. Keep container closed when not in use.

Incompatible Materials: Avoid strong reducing agents, soft metals, heat and bases.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Product AS SOLD:

EXPOSURE LIMITS:			OSHA PEL	ACGIH TLV		
	CHEMICAL NAME	CAS NO.	TWA	STEL/CEILING	TWA	STEL
	ACETIC ACID	64-19-7	10 ppm	15 ppm/40 ppm (CalOSHA)	10 ppm	15 ppm
	HYDROGEN PEROXIDE	7722-84-1	1 ppm	1 ppm/N/A (CalOSHA)	1 ppm	N/A
	PERACETIC ACID	79-21-1	N/A	N/A	N/A	0.4 ppm

Ventilation and engineering measures: Forced air, local exhaust, or open air is adequate.

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

Skin Protection: Wear chemical resistant gloves and chemical resistant garments when handling, wash garments before re-use.

Eye/Face Protection: Wear chemical goggles; also wear a face shield if splashing hazard exists.

Other Protective Equipment: Eye wash facility and emergency shower should be in close proximity.

General Hygiene Conditions: Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industry hygiene and safety practice.

Product AT USE DILUTION:

Ventilation and engineering measures: No special equipment needed.

Respiratory Protection: No respiratory personal protective equipment (PPE) required.

Skin Protection: No personal protective equipment (PPE) required.

Eye/Face Protection: No personal protective equipment (PPE) required.

Other Protective Equipment: No special protective equipment required.

General Hygiene Conditions: Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Product AS SOLD:

Appearance: Clear colorless liquid

Odor: Vinegar odor pH: <1 (1:10)

Melting/Freezing point: <-8°C /<17°F

Initial boiling point and boiling range: No information available

Flash Point: > 200° F / >93 ° C

Flammability (solid, gas): Non flammable

Vapor Pressure (mm Hg): 25 Specific gravity: 1.11 g/mL Solubility in Water: Complete

Auto ignition Temperature: >518° F/ >270° C

Decomposition temperature: No information available

Viscosity: 5-15 cSt at 20°C / 68°F Volatiles (% by weight): >99

Volatile organic Compounds (VOC's): No information available

Product AT USE DILUTION:

Appearance: Clear colorless liquid

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Odor: Slight vinegar odor

pH: 3.0-4.0

SECTION 10 - STABILITY AND REACTIVITY

Product AS SOLD:

Reactivity: Reactive with bases, metals, reducing agents and combustible materials Chemical Stability: Stable for up to 1 year when stored under normal conditions. Possibility of Hazardous Reactions: May react with incompatible materials

Conditions to Avoid: Incompatible materials and high temperatures

Incompatible Materials: Reactive with bases, metals, reducing agents and combustible materials

Solutions of sodium and/or potassium hydroxide may be mixed with or added to water containing peroxyacetic acid solutions (<4000 ppm) with no known

adverse health, safety or physical concerns. No known side reactions or noxious by-products will occur.

Hazardous Decomposition Products: Oxygen which supports combustion.

Product AT USE DILUTION:

Reactivity: Reactive with bases, metals, reducing agents and combustible materials

Chemical Stability: Stable for up to 8-24 hours in distilled water. Chemical stability may be drastically reduced if hard water is used.

Possibility of Hazardous Reactions: May react with incompatible materials

Conditions to Avoid: Incompatible materials and high temperatures

Incompatible Materials: Reactive with bases, metals, reducing agents and combustible materials

Hazardous Decomposition Products: None known.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product AS SOLD:

Information on likely routes of exposure:

Routes of entry - inhalation: YES
Routes of entry - skin & eye: YES
Routes of entry - ingestion: YES
Routes of entry - skin absorption: NO

Potential Health Effects:

Signs and symptoms of short term (acute) exposure:

Inhalation: May cause irritation to respiratory system in mist/vapor form.

Ingestion: Corrosive! Swallowing causes severe burns of mouth, throat, and stomach. Severe scarring of tissue, corrosion, permanent tissue destruction and death may result. Symptoms may include severe pain, nausea, vomiting, diarrhea, shock, hemorrhaging and/or fall in blood pressure. Damage may appear days after exposure.

Skin: Corrosive! Contact with skin causes irritation or severe burns and scarring with greater exposures.

Eye: Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.

Potential Chronic Health Effects:

Mutagenicity: Not known to have mutagenic effects in humans or animals.

Carcinogenicity: No components are listed as carcinogens by ACGIH, IARC, OSHA, or NTP.

Reproductive effects: No known reproductive effects in humans or animals.

Sensitization to material: Not a known sensitizer in humans or animals.

Specific target organ effects: No known specific target organ effects.

Medical conditions aggravated by overexposure: No information available

Toxicological data: The calculated ATE values for this mixture are:

ATE oral = 640 mg/kg ATE dermal = 1905 mg/kg

ATE inhalation = >20 mg/L or >20,000 ppm

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Product AT USE DILUTION:

Information on likely routes of exposure:

Routes of entry - inhalation: NO
Routes of entry - skin & eye: NO
Routes of entry - ingestion: YES
Routes of entry - skin absorption: NO

Potential Health Effects:

Signs and symptoms of short term (acute) exposure:

Inhalation: Not a respiratory irritant.

Ingestion: May cause irritation to the digestive system.

Skin: Not a skin irritant, but may cause skin irritation on some individuals if not washed from skin. Rinse hands thoroughly if exposed.

Eye: Not an eye irritant.

Potential Chronic Health Effects:

Mutagenicity: No known mutagenic effects.

Carcinogenicity: No components are listed as carcinogens by ACGIH, IARC, OSHA, or NTP.

Reproductive effects: No known reproductive effects.

Sensitization to material: No expected to cause sensitization.

Specific target organ effects: No information available

Medical conditions aggravated by overexposure: No information available.

Toxicological data: The calculated ATE values for this mixture are:

ATE oral = 3773 mg/kg

ATE dermal = >10,000 mg/kg

ATE inhalation = >20 mg/L or >20,000 ppm

SECTION 12 - ECOLOGICAL INFORMATION

Product AS SOLD:

Ecotoxicity: May be harmful to aquatic life.

Persistence and degradability: Not expected to persist. Expected to readily biodegrade.

Bioaccumulation potential: Not expected to bio accumulate.

Mobility in soil: No information available

Product AT USE DILUTION

Ecotoxicity: No information available.

Persistence and degradability: No information available.. Bioaccumulation potential: No information available.

Mobility in soil: No information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Product AS SOLD:

Handling for disposal: Do not contaminate water, food, or feed by storage and/or disposal. When handling refer to protective measures listed in sections 7 and 8. Empty residue from containers, rinse container well.

Method of disposal: Dispose of in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

RCRA: If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA, because of: Corrosivity D002

Product AT USE DILUTION:

Handling for disposal: Do not contaminate water, food, or feed by storage and/or disposal. When handling refer to protective measures listed in sections 7 and 8. Empty residue from containers, rinse container well.

Method of disposal: Dispose of in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or

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federal environmental agency for specific rules.

SECTION 14 - TRANSPORTATION INFORMATION

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

Please note the GHS and DOT Standards are NOT identical and therefore can have varying classifications

Product AS SOLD:

US 49 CFR/DOT/IATA/IMDG Information:

UN No.: 3109

UN Proper Shipping Name: Organic peroxide type F, liquid (<=25% peracetic acid with <=26% hydrogen peroxide)

Transportation hazard class(es): 5.2 (8)

Environmental hazards: No hazards identified.

SECTION 15 - REGULATORY INFORMATION

Product AS SOLD:

US Federal Information:

TSCA information: All components are listed on the TSCA inventory.

US CERCLA Reportable quantity (Hazardous substance RQ): Acetic acid has a RQ of approximately 10000 lbs of as is chemical.

US EPCRA Reportable quantity (Extremely hazardous substance RQ): Peracetic acid has a RQ of approximately 2200 lbs. of as is chemical.

Clean Air Act Section 112(r) Threshold Quantity (TQ): Peracetic acid has a TQ of approximately 45000 lbs. of as is chemical.

SARA Title III: Reactivity Hazard, Acute Health Hazard

US State Right to Know Laws:

SECTION 16 - OTHER INFORMATION

Product AS SOLD:

NFPA Health Hazards 3 Flammability 1 Stability 1 Special Hazards OX, COR
HMIS Health Hazards 3 Flammability 1 Physical Hazard 1 Personal Protection C

NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Special hazards: OX = Oxidizer; COR = Corrosive

Personal Protection = C (safety glasses, gloves, protective apron)

Product AT USE DILUTION:

NFPA Health Hazards 2 Flammability 0 Stability 0 Special Hazards NONE
HMIS Health Hazards 2 Flammability 0 Physical Hazard 0 Personal Protection 0
NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Personal Protection = 0 (none)

Legend:

SARA: The Superfund Amendments and Reauthorization Act

RCRA: Resource Conservation and Recovery Act

TSCA: Toxic Substances Control Act CFR: Code of Federal Regulations DOT: Department of Transportation ATE: Acute Toxicity Estimate

Preparation date: 1/1/2019