S A F E T Y D A T A S H E E T

® Madison Chemical Co., Inc.

3141 Clifty Drive ● Madison, IN 47250

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

NAME: **MADISON OXY-SAN**

TYPE: Peroxyacetic Acid Sanitizer E.P.A. Reg. No. 63838-13-110

PRODUCT # 777751

FOR INDUSTRIAL USE ONLY – KEEP OUT OF THE REACH OF CHILDREN

EMERGENCY RESPONSE INFORMATION:

CHEMTREC	800-424-9300	24-Hour Service
Company Offices:	812-273-6000	Weekdays
Cara Cyrus:	812-599-3611	Evenings and Weekends
Bill Torline:	812-599-4976	Evenings and Weekends

PREPARED DATE: 12-21-15 PREPARED BY: Benjamin Terpening

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification

Oxidizing Liquid	Category 1	H271
Acute Toxicity (Oral)	Category 4	H302
Skin Corrosion/Irritation	Category 1A	H314
Serious Eye Damage/Eye Irritation	Category 1	H318
Acute Toxicity (Inhalation: fume)	Category 3	H331
Aquatic Toxicity (Acute)	Category 1	H400

Signal Word: DANGER

Symbol

Hazard Statements

H271 May cause fire or explosion; strong oxidizer
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H400 Very toxic to aquatic life.

Precautionary Statements

P210 Keep away from heat, sparks, open flames, hot surfaces.
P220 Keep/Store away from clothing/combustible materials.
P221 Take precaution to avoid mixing with combustibles
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash hands, forearms, and exposed areas 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 eye protection, face protection, protective clothing, protective gloves.
P283 Wear fire/flame resistant/retardant clothing

P301 + P330 + P331 + P312 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304 + P340 IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.
P306 + P360 IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P321 Specific treatment (see Section 4).
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use water spray, carbon dioxide, or foam for extinction
P371+P380+P375 In case of major fire: Evacuate area. Fight fire remotely due to the risk of explosion.
P403+P233 Store in a well ventilated place. Keep container tightly closed.
P405 Store locked up.
P410 Protect from sunlight.
P412 Store at temperatures not exceeding 86°F (30°C)
P501 Dispose of contents / container according to local, regional, national and international regulations.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	SYNONYM	CAS NO.	% BY WEIGHT
Hydrogen peroxide	None	7722-84-1	26.5 – 27.5
Acetic Acid	Vinegar acid, Ethanoic acid	64-19-7	5 – 10
Peroxyacetic Acid	Peracetic Acid	79-21-0	4.8 – 5.1

If Chemical Name/CAS No is "proprietary" and/or % By Weight is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret

SECTION 4: FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES:

EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

SKIN: Take off contaminated clothing and shoes. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Wash clothing and shoes thoroughly in soap and water; rinse repeatedly in clean water and dry before reuse.

INGESTION: Call a poison control center or doctor immediately for treatment advice. Have person sip glass of water if able to swallow. DO NOT INDUCE VOMITING unless told to do so by poison control center or doctor. DO NOT give anything by mouth if the person is unconscious or if having convulsions.
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

INHALATION: Move subject to fresh air. IF person is not breathing, call 911 or ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

PRIMARY ROUTE(S) OF ENTRY: Eyes, skin, inhalation.

MOST IMPORTANT SYMPTOMS / EFFECTS, ACUTE AND DELAYED:

EYE CONTACT: Causes serious eye damage.
SKIN CONTACT: Causes severe burns.
INGESTION: Harmful if swallowed.
INHALATION: May be fatal.
CHRONIC SYMPTOMS: None expected under normal conditions of use.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY:
If you experience any of the symptoms / effects listed above seek medical advice.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:
Use extinguishing media as appropriate for surrounding fire.

SPECIFIC HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:
Not considered flammable or explosive. Hazardous reactions will not occur under normal conditions.

ADVICE FOR FIRE FIGHTERS:
Use flooding quantities of water only. Use water spray to keep containers cool. Fight fire from protected or removed distance. Wear self-contained breathing apparatus with full face piece operated in positive pressure mode and full body protective clothing Hazardous Combustion Products: Hydrogen chloride fumes, oxides of carbon and ammonia

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES:
Shut off ignition sources. Always approach spills from upwind.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:
Small spills may be flushed to an approved sewer line with generous amounts of water. For larger spills, dike well ahead of spill with non-reactive material such as sand. Spill may be neutralized with soda ash (sodium carbonate) broadcasted on surface. Use 1.0 to 1.5 lb. of soda ash for each gallon of spilled material. The resultant neutralized product will become carbon dioxide and water. Flush material with water and collect for disposal into plastic container. Dispose of in accordance with federal, state, and local laws. Combustible materials should be removed and/or rinsed with water to ensure all residual hydrogen peroxide is removed to the extent possible.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:
Store drums in upright position only. Empty drums as thoroughly as possible. Triple rinse before disposal. Ne
Never return product to original container

CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES:
Do not store near reducing agents, fuels, organic material, or other non-compatible materials. Store in a cool, dry, well ventilated area. Avoid temperatures above 86°F. DO NOT STORE IN DIRECT SUNLIGHT, or near sources of ignition or heat. Use first in, first out storage management. Container must be vented. Keep container closed at all times when not in use.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

CHEMICAL IDENTITY	CAS NO.	OSHA PEL	ACGIH TLV
Hydrogen peroxide	7722-84-1	1 ppm	1 ppm
Acetic Acid	64-19-7	10 ppm	10 ppm
Peroxyacetic Acid	79-21-0	N.E.	N.E.

ENGINEERING CONTROLS:
Use good ventilation. Local exhaust is recommended if TLVs are exceeded.

INDIVIDUAL PROTECTION MEASURES:
Selection of personal protective equipment should be based upon the anticipated exposure and made in accordance with OSHA's Personal Protective Equipment Standard found in 29 CFR 1910 Subpart I. The following information may be used to assist in PPE selection.

RESPIRATORY PROTECTION:
In absence of proper environmental control, use NIOSH / MSHA approved positive pressure supplied air respirator for mists where airborne exposure is excessive.

SKIN PROTECTION:
Impermeable type rubber gloves. Other equipment as required to avoid contact.

EYE PROTECTION:
Goggles and faceshield necessary.

GENERAL HYGIENE CONSIDERATIONS:
Eyewash facility and emergency shower should be in close proximity. Always wash hands after handling any chemical.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Colorless liquid
ODOR:	Sharp, pungent, vinegar like.
ODOR THRESHOLD:	Not available.
pH (10%):	<1
MELTING POINT/FREEZING POINT	Not available
INITIAL BOILING POINT AND BOILING RANGE	Not available.
FLASH POINT (METHOD USED)	> 200°F. (closed cup).
EVAPORATION RATE	Not available.
FLAMMABILITY (SOLID, GAS)	Not available.
UPPER/LOWER FLAMMABLE OR EXPLOSIVE LIMIT	Not available.
VAPOR PRESSURE	22 mm Hg @ 25°C.
VAPOR DENSITY	Not available.
SPECIFIC GRAVITY	1.12

SOLUBILITY IN WATER	Complete.
PARTITION COEFFICIENT: N-OCTANOL/WATER	Not available.
AUTO-IGNITION TEMPERATURE	Not available.
VISCOSITY, DYNAMIC	Not available.
DECOMPOSITION TEMPERATURE	Not available.
VISCOSITY	Not available.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	Hazardous reactions will not occur under normal conditions.
CHEMICAL STABILITY:	Product is shelf stable for up to 1 year when stored under recommended handling and storage conditions (see Section 7).
POSSIBILITY OF HAZARDOUS REACTIONS:	Hazardous polymerization will not occur.
CONDITIONS TO AVOID:	Open flames, elevated temperatures, any source of heat, combustibles such as paper, wood, or leather. Temperatures above 86°F will degrade product, accelerate decomposition, and reduce shelf life..
INCOMPATIBLE MATERIALS:	Dirt, alkali, organics, leather, paper, wood, and heavy metals.
HAZARDOUS DECOMPOSITION PRODUCTS:	Acetic acid and oxygen.

SECTION 11: TOXOLOGICAL INFORMATION

ACUTE TOXICITY:	May be fatal if inhaled. Harmful if swallowed.
LD50 AND LC50 DATA:	Not available.
ROUTES OF EXPOSURE / SYMPTOMS	
EYES:	DANGER! Causes burns.
SKIN:	DANGER! Causes burns.
INGESTION:	WARNING!! Harmful if swallowed.
INHALATION:	DANGER! May be fatal if inhaled.
GERM CELL MUTAGENICITY:	Not classified.
TERATOGENICITY:	Not available.
CHRONIC EFFECTS / CARCINOGENICITY:	This material contains no ingredient above de minimus concentrations known or suspected to cause cancer.
SPECIFIC TARGET ORGAN TOXICITY (Repeated exposure):	Not classified.
REPRODUCTIVE TOXICITY:	Not classified.
SPECIFIC TARGET ORGAN TOXICITY (Single exposure):	Not classified.
ASPIRATION HAZARD:	Not classified.

COMPONENT INFORMATION:

Hydrogen peroxide	LD50 Oral rat:	500 mg/kg
Acetic Acid	LD50 Oral rat:	3310 mg/kg
	LD50 Dermal rabbit	1060 mg/kg
Peracetic acid	LD50 Oral mouse:	210 mg/kg
	LD50 Dermal rat:	>12,000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: Very toxic to aquatic organisms

COMPONENT INFORMATION

Madison Oxy-San	<u>Freshwater Data:</u>		
	Fathead Minnow:	Chronic LC50:	1.16 ppm
	Ceriodaphnia:	Chronic, reproductivity, LC50:	1.03 ppm
	Bluegill Sunfish:	Acute LC50:	1.21 ppm
	Daphnia magna:	Acute LC50:	0.76 ppm
	Rainbow Trout:	Acute, LC50:	0.68 ppm
	<u>Marine Data:</u>		
	Pacific Silverside:	Acute, LC50:	2.2 ppm
	Sheepshead monnow:	Acute, LC50: 3.8 ppm Chronic: 5.9 ppm	
	Topsmelt:	Acute LC50:	2.8 ppm
	Mysid:	Acute:	0.7 ppm
	Bay Mussle:	Acute, LC50:	2.91 ppm

	M bahia:	Chronic:	0.35 ppm

PERSISTENCE AND DEGRADABILITY: Not available.

BIOACCUMULATIVE POTENTIAL: Not available.

MOBILITY IN SOIL: Not available.

OTHER ADVERSE EFFECTS: This material contains no hazardous air pollutants (HAPS).

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or Hazardous Waste representative at the nearest EPA Regional Office for guidance. If material has been spilled, an acceptable method of disposal is to dilute with at least 20 volumes of water followed by discharge into a suitable treatment system in accordance with all Local, State, and Federal environmental laws, rules, regulations, standards, and other requirements. Because acceptable methods of disposal may vary by location, regulatory agencies should be contacted prior to disposal. Material to be discarded should be disposed of as hazardous waste after contacting the appropriate Local, State, or Federal agency to determine proper procedures.

SECTION 14: TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Hydrogen peroxide and peroxyacetic acid mixtures, stabilized with acids, water, and not more than 5% peroxyacetic acid

HAZARD CLASS: 5.1 (8)

IDENTIFICATION NUMBER: UN3149

PACKING GROUP: II

EMERGENCY RESPONSE GUIDE: ERG #140

SECTION 15: REGULATORY INFORMATION

VOC: 0.0 pounds per gallon (0 grams per liter).

TSCA STATUS: All ingredients are listed on the TSCA inventory.

CERCLA REPORTABLE QUANTITY: 1,000 pounds of hydrogen peroxide (approximately 389 gallons)
5,000 pounds of acetic acid (approximately 5,376 gallons)

SARA 311 / 312 HAZARD CLASSES

x	ACUTE HEALTH
	FIRE
	SUDDEN RELEASE OF PRESSURE
	CHRONIC HEALTH
	REACTIVE

SARA 312 INFORMATION: Peroxyacetic acid is an extremely hazardous substance (EHS) under SARA. Its threshold planning quantity is 500 pounds. Hydrogen peroxide, a component of this product, is an extremely hazardous substance (EHS) under SARA. The threshold planning quantity is 1,000 pounds.

SARA 313 INFORMATION: This material contains the following substances subject to the reporting requirements of Section 313 of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372

CHEMICAL NAME	CATEGORY CODE	CAS NUMBER	% BY WEIGHT
Peroxyacetic acid	None	79-21-0	4.8 – 5.1

STATE REGULATORY INFORMATION

CALIFORNIA PROPOSITION 65: California has not identified the ingredients listed in Section 3 as known to cause cancer or reproductive toxicity.

SECTION 16: OTHER INFORMATION

SDS STATUS: Revised to GHS Standards on 12-21-15.

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	1

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