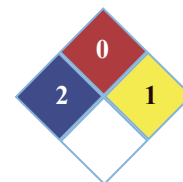


**PRODUCT****MATERIAL SAFETY DATA SHEET**
**MERAS**  
**Micro San-3**

 601 VAN NESS AVE. #E3-725, SAN FRANCISCO, CA. 94102  
 PH.866.899.9762

**CONTACT:**  
 ChemTrec 800-424-9300

**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME: Micro San 3  
 PRODUCT USE: Water treatment chemical, reaction catalyst.  
 (Part three of the three component Micro San system)  
 COMMON CHEMICAL NAME: Hypochlorite solution sodium salt, sodium hypochlorite  
 MANUFACTURER: Meras Engineering  
 601 Van Ness Ave #E3-725  
 San Francisco, CA 94102  
 PRODUCT INFORMATION: 1-866-899-9762 (outside the U.S. 1-415-240-4918)  
 TRANSPORT EMERGENCY: CHEMTREC: 1-800-424-9300 (outside the U.S. 1-703-527-3887)  
 OTHER INFORMATION: professional use

**SECTION II - HAZARDS IDENTIFICATION**
**POTENTIAL ROUTE [S] OF ENTRY**

INHALATION [BREATHING]: Unlikely to occur. Vapor may cause irritation to upper respiratory tract.  
 DERMAL [SKIN]: Contact with broken skin may cause burning, blistering, and tissue destruction if not washed off immediately.  
 EYES: Corrosive to eyes.  
 INGESTION: Not anticipated. May cause severe chemical burns to esophagus and to stomach lining.

**SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS-No.	Concentration
Sodium hypochlorite	7681-52-9	7.5 - 15%
Water	7732-18-5	91.5 - 75 %
Proprietary Blend		1 - 10%

**SECTION IV - FIRST AID MEASURES**
**FIRST AID**

EYE CONTACT: Flush with water. Remove contact lenses [if applicable]. Hold eyelids open. Continue flushing with water for 15 minutes. Get prompt medical attention.  
 SKIN CONTACT: Wash affected area with water for 15 minutes. Get medical attention.  
 INGESTION [SWALLOWING]: Drink large quantities of water. DO NOT give vinegar or other acids. DO NOT induce vomiting. Get prompt medical attention.

**SECTION V - FIRE-FIGHTING MEASURES**
**PHYSICAL HAZARDS**

POTENTIAL FOR FIRE: None. Nonflammable and Noncombustible liquid.  
 POTENTIAL FOR EXPLOSION: None. Nonflammable and Noncombustible liquid.  
 EXTINGUISHING MEDIA: N/A  
 FIRE FIGHTING PROCEDURES: N/A

**SECTION VI - ACCIDENTAL RELEASE MEASURES**

REVISED: 02/16/11

**CLEAN-UP OF SPILLS**

Store this product in a cool, dry area, away from sunlight and heat to avoid deterioration. In case of spill, flood area where spill has occurred with large quantities of water. With permission from local authorities, diluted product may be flushed to a sanitary sewer. Product may also be absorbed with sand or diatomaceous earth. Absorbed products must be disposed of in accordance with applicable Federal, State, and/or local regulations. Contact HASA, Inc. for guidance.

**SECTION VII - HANDLING AND STORAGE**

**GENERAL PRECAUTIONS FOR SAFE USE AND HANDLING**

Open containers carefully. Sodium hypochlorite solutions are packaged with vented closures. Do not use containers which are leaking or show evidence of having leaked. Mix only with water. Do not mix with other chemicals. Use clean, dry utensils when mixing. Do not discharge this product or mixtures of this product into lakes, streams, ponds, bays, estuaries, or the ocean. Sodium hypochlorite is toxic to aquatic organisms at very low levels.

**SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION**

**PERSONAL PROTECTION AND HYGIENE**

Wear goggles or face shield and rubber gloves when handling. Remove and wash contaminated clothing before reuse. Wash hands after handling.

**SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES**

**PHYSICAL AND CHEMICAL PROPERTIES**

VAPOR PRESSURE:	12.1 mm Hg at 20°C [12.5% solution]	Flash Point:	Not Applicable.
WEIGHT/GALLON:	10.0 lbs. (4.54 kg.)	pH:	11.2 – 11.4
DENSITY [LIQUID]:	1.20 at 20°C (68°F)	Odor:	Slight Bleach
BULK DENSITY:	Not Applicable.	Boiling Point:	Decomposes
MELTING POINT:	Not Applicable.	Freezing Point:	-20° Fahrenheit
PHYSICAL STATE:	Liquid Solution	Color:	Straw Yellow
SOLUBILITY IN WATER:	Complete	Stability:	Stable

**SECTION X - STABILITY AND REACTIVITY**

**REACTIVITY:**

Violent reactions with amines, ammonium aldehyde, ammonium carbonate, aziridine, methanol, phenylacetonitrile, ammonium nitrate, ammonium oxylate, ammonium phosphate, cellulose, ethylene imine. Do not mix acids, aqua ammonia, or other organic or inorganic chemicals with this product.

**SECTION XI - TOXICOLOGICAL INFORMATION**

**HEALTH HAZARDS**

SIGNS AND SYMPTOMS OF EXPOSURE: Eyes and skin irritation. Chemical burns to broken skin.

**MEDICAL CONDITIONS**

AGGRAVATED BY EXPOSURE:	No data available.
ORAL [INGESTION] LD50:	No data available.
DERMAL [SKIN ABSORPTION] LD50:	No data available.
INHALATION [BREATHING] LC50:	No data available.
EYE IRRITATION:	Irritating. May cause eye damage.
SKIN IRRITATION:	Mild irritation. Not considered to be a skin sensitizer.
OSHA PEL:	None established.
ACGIH TLV/TWA:	None established.

**CARCINOGENIC [CANCER POTENTIAL] INFORMATION**

NATIONAL TOXICOLOGICAL PROGRAM [NTP]  
SIXTH ANNUAL REPORT ON CARCINOGENS:

Not listed.

INTERNATIONAL AGENCY FOR RESEARCH ON CANCER  
[IARC] MONOGRAPHS, V. 1-53, SUPPS. 1-8:

Not listed.

LISTED BY FEDERAL OSHA AS CARCINOGENS:

Not listed.

SAFE DRINKING WATER AND TOXIC ENFORCEMENT  
ACT OF 1986 [PROPOSITION 65, CALIFORNIA ONLY]:

Small quantities – less than 100 ppm (parts per million) – of impurities, including bromates, may be found in all chlorinating products, including this product. Bromates are derived from bromides, which are present in sodium chloride (table salt) from which chlorine is manufactured. Additional small quantities of bromates may be generated during the disinfection process. Bromates are known by the State of California to cause cancer when administered by the oral (drinking or ingesting) route. Read and follow label directions and use care when handling or using this product. The US Environmental Protection Agency has established a maximum contaminant level (MCL) for bromates in drinking water at 10 ppb (parts per billion). Application of this product in accordance with label directions at use dilution will not exceed this level. This warning is provided pursuant to Proposition 65, the Safe Drinking Water and Toxic Enforcement act of 1986, Chapter 6.6 of the California Health and Safety Code, which requires the Governor of California to publish a list of chemicals “known to the state to cause cancer or reproductive toxicity.” This list is compiled in accordance with the procedures established under the proposition, and can be obtained on the internet from California’s Office of Environmental Health Hazard Assessment at <http://www.oehha.ca.gov>. There are over 700 chemical substances on this list.

**SECTION XII - ECOLOGICAL INFORMATION**

ADDITIONAL ECOLOGICAL INFORMATION:

No data is available on the product itself.

**SECTION XIII - DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL :

Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.

ENVIRONMENTAL HAZARDS:

Empty containers should be taken to an approved waste handling site for recycling or disposal.

If recycling is not practicable, dispose of in compliance with local regulations.

**SECTION XIV - TRANSPORT INFORMATION**

**HAZARDOUS MATERIALS TRANSPORTATION REGULATIONS,  
DEPARTMENT OF TRANSPORTATION (FEDERAL) 49 CFR 172.101**

PROPER SHIPPING DESCRIPTION [1 GALLON OR LESS]:

Consumer Commodity, ORM-D

PROPER SHIPPING DESCRIPTION [GREATER THAN 1 GALLON]:

Hypochlorite Solutions, 8, UN1791, P.G. III

UNIFORM FIRE CODE STANDARDS 79-3,

UNIFORM FIRE CODE, V. II [1997 EDITION]:

2-0-0

**SECTION XV - REGULATORY INFORMATION**

REVISED: 02/16/11

FEDERAL/STATE LISTS/REGISTRATION/S/REPORTING REQUIREMENTS

CERCLA HAZARDOUS SUBSTANCE [SECTION 1010 [4], P.L. 96-510]:

EXTREMELY HAZARDOUS SUBSTANCE [40 CFR 355, APPENDIX A]:

PESTICIDE PRODUCT 7 U.S.C. 136 ET SEQ.:

TOXIC SUBSTANCE UNDER TSCA:

PESTICIDE PRODUCT [VARIOUS STATE LAWS]:

RQ=100 lbs [80 gallons for 12.5% solution]

Not listed.

Registered as a pesticide product by Federal EPA.

Not reported.

Registered as pesticide product in states where marked.

**MATERIAL CLASSIFICATION**

OSHA HAZARD COMMUNICATION STANDARD, DEPARTMENT OF LABOR,

OCCUPATIONAL SAFETY AND HEALTH DIVISION, 29 CFR 1910.1200:

Irritant

**SECTION XVI - OTHER INFORMATION**

CONTACT PERSON:

MSDS Coordinator, Meras Engineering Inc, San Francisco, CA 94102, (866) 899-9762

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.