

## PRODUCT

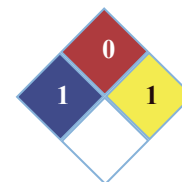
# MATERIAL SAFETY DATA SHEET



## MERAS Organic Emitter Kleen 250

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

PH. 866.899.9762



CONTACT:  
ChemTrec 800-424-9300

### SECTION I - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Organic Emitter Kleen 250  
PRODUCT USE: Water treatment chemical, helps to maintain irrigation system cleanliness.  
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 HEALTH EFFECTS

SKIN: Sodium chlorite: May irritate skin.  
EYES: Sodium chlorite: May irritate eyes.  
INHALATION: Sodium chlorite: Respiratory irritation  
INGESTION: Sodium chlorite: Gastrointestinal discomfort  
CARCINOGENICITY: None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

### SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Sodium chlorite	7758-19-2	15 - 31%
Water	7732-18-5	64 - 84 %
Proprietary Components		1 - 5%

### SECTION IV - FIRST AID MEASURES

SKIN CONTACT: Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water. Call a poison control center or doctor for treatment advice.  
EYE CONTACT: Rinse immediately with plenty of water and seek medical advice.  
INHALATION: Move to fresh air. If not breathing, give artificial respiration. Call a poison control center or doctor for treatment advice.  
INGESTION: Call a poison control center or doctor for treatment advice. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.  
NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

### SECTION V - FIRE-FIGHTING MEASURES

#### FLAMMABLE PROPERTIES

FLASH POINT: Not applicable  
THERMAL DECOMPOSITION: Stable under normal conditions., Decomposes on heating.  
FIRE AND EXPLOSION HAZARD: Drying of this product on clothing or combustible materials may cause fire.  
SUITABLE EXTINGUISHING MEDIA: Water  
FIREFIGHTING INSTRUCTIONS: Wear self-contained breathing apparatus (SCBA).  
Wear suitable protective equipment.

## **SECTION VI - ACCIDENTAL RELEASE MEASURES**

REVISED: 02/16/11

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with cleanup.  
Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

SAFEGUARDS (PERSONNEL): Evacuate personnel to safe areas.  
SPILL CLEANUP: Dilute with water. Pick up and transfer to properly labelled containers.  
After cleaning, flush away traces with water.  
ACCIDENTAL RELEASE MEASURES: Prevent material from entering sewers, waterways, or low areas. Do not allow to dry.

## **SECTION VII - HANDLING AND STORAGE**

HANDLING (PERSONNEL): Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing.  
Wash hands before breaks and at the end of workday.  
HANDLING (PHYSICAL ASPECTS): Avoid letting the product become dry.  
STORAGE: Keep tightly closed in a dry, cool and well-ventilated place. Keep away from food, drink and animal feedingstuffs. Avoid heat, freezing and ultraviolet light. Do not allow to dry. Keep away from: Strong acids and oxidizing agents.

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

ENGINEERING CONTROLS: Ensure adequate ventilation, especially in confined areas.

### **PERSONAL PROTECTIVE EQUIPMENT**

RESPIRATORY PROTECTION: Where there is potential for airborne exposures in excess of applicable limits, wear approved respiratory protection with dust/mist cartridge.  
HAND PROTECTION: Additional protection: Impervious gloves  
EYE PROTECTION: Wear overall chemical splash goggles. Additionally wear a face shield where the possibility exists for face contact due to splashing, spraying or airborne contact with this material.  
SKIN AND BODY PROTECTION: Where there is potential for skin contact, have available and wear as appropriate, impervious gloves, apron, pants, jacket, hood and boots.  
PROTECTIVE MEASURES: Avoid exposure - obtain special instructions before use. Wear suitable gloves and eye/face protection.

### **EXPOSURE GUIDELINES**

EXPOSURE LIMIT VALUES: None established.

## **SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES**

FORM: liquid  
COLOR: light yellow  
ODOR: odorless, slight chlorine  
PH: > 12  
FREEZING POINT: ca. -18 °C (0 °F)  
CRYSTALLIZATION TEMPERATURE: ca. -9 °C (16 °F)  
BOILING POINT: ca. 106 °C (223 °F)  
VAPOUR PRESSURE: ca. 15.5 mm Hg at 20 °C (68 °F)  
DENSITY: ca. 10.05 lb/gal  
SPECIFIC GRAVITY: 1.2 - 1.23  
WATER SOLUBILITY: miscible

## **SECTION X - STABILITY AND REACTIVITY**

STABILITY: Stable at normal temperatures and storage conditions. Decomposes on heating.  
INCOMPATIBILITY: Strong acids and oxidizing agents Organic materials, chlorinated compounds, Reducing agents  
HAZARDOUS REACTIONS: Contact with acids, organic materials, reducing agents and oxidizing agents will release toxic gases of chlorine and/or chlorine dioxide.

**SECTION XI - TOXICOLOGICAL INFORMATION**

REVISED: 02/16/11

**SODIUM CHLORITE**

DERMAL LD50: 134 mg/kg , rabbit  
 ORAL LD50: 284 mg/kg , rat  
 INHALATION 4 H LC50: 0.23 mg/l , rat  
 SKIN IRRITATION: irritant  
 EYE IRRITATION: irritant  
 REPEATED DOSE TOXICITY: Oral  
 rat  
 Abnormal decrease in number of red blood cells, Abnormal decrease in red - blood -cell haemoglobin (hemoglobinemia)  
 Oral  
 rat  
 Organ weight changes, Liver  
 Oral  
 Monkey  
 Thyroid effects  
 CARCINOGENICITY: Animal testing did not show any carcinogenic effects.  
 MUTAGENICITY: Did not cause genetic damage in cultured mammalian cells.  
 REPRODUCTIVE TOXICITY: Animal testing showed effects on reproduction at levels equal to or above those causing parental toxicity.  
 TERATOGENICITY: Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

**SECTION XII - ECOLOGICAL INFORMATION**

**AQUATIC TOXICITY**

SODIUM CHLORITE 96 h LC50: Cyprinodon variegatus (sheepshead minnow) 75 mg/l  
 96 h EC50: Desmodemus subspicatus (green algae) 1.32 mg/l  
 72 h ErC50: Algae 1.2 mg/l  
 48 h EC50: Daphnia magna (Water flea) 0.0146 mg/l  
 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**

DOT UN number: 1908  
 Proper shipping name: Chlorite solution  
 Class: 8  
 Packing group: II  
 Labelling No.: 8  
 IATA\_C UN number: 1908  
 Proper shipping name: Chlorite solution  
 Class: 8  
 Packing group: II  
 Labelling No.: 8  
 IMDG UN number: 1908  
 Proper shipping name: Chlorite solution  
 Class: 8  
 Packing group: II  
 Labelling No.: 8  
 Marine pollutant: yes (Sodium chlorite)  
 Marine pollutant

**SECTION XV - REGULATORY INFORMATION**

REVISED: 02/16/11

TSCA STATUS: Listed.  
SARA 313 REGULATED: SARA 313: This material does not contain any chemical components with Chemical(s) known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.  
EPA REG. NO.: 9150-7

In the United States this product is regulated by the US Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read and follow all label directions.  
This product is excluded from listing requirements under EPA/TSCA.

CALIFORNIA PROP. 65: Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known  
NJ RIGHT TO KNOW: Substances on the New Jersey Workplace Hazardous Substance List Regulated Chemical(s) present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): Sodium chlorite

**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.