

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: ECOTREAT (ECT)

EMERGENCY PHONE: 1-800-424-9300				VII - PRECAUTIONS FOR SAFE HANDLING AND USE				
<p>May be used to comply with OSHA'S Hazard Communications Standard (HSC) 29 CFR 1910, 1200. Standard must be consulted for specific requirements. This product contains no substances subject to SARA TITLE III and 40 CFR.</p>				HMIS SYMBOLS		<p>STEPS TO BE TAKEN IN CASE CONTAINER IS PUNCTURED AND MATERIAL IS RELEASED: SMALL SPILLS: Involving less than 10 gallons, may be flushed to a designated and permitted sewer with copious amounts of water. LARGE SPILLS: Contain and neutralize with sodium bisulfite or sodium thiosulfate (1.2 lbs neutralizer per each estimated lb. of spilled material) or disposed of as chemical waste in the manner indicated below. The vicinity of the spill should be thoroughly flushed with water after clean-up. At no time should the spilled material be allowed to dry to a crystalline salt. Do not discharge this product to storm drains or to any surface or ground water source unless specifically allowed under a valid NPDES permit.</p>		
				HEALTH	1			
I - IDENTIFICATION				FLAMMABILITY		0		
REACTIVITY				1		<p>WASTE DISPOSAL METHOD: Small quantities, less than 10 gallons may be flushed to an authorized and permitted sewer with copious amounts of water. Larger volumes should be taken to an authorized chemical disposal site (Class I or landfill) in accordance with all federal, state, and local regulations. Consult with selected facility regarding the need for prior neutralization of wastes.</p>		
PRODUCT NAME: ECOTREAT (ECT)		PACKAGE TYPE: quart, gallon, pail, drum						
PREPARED DEPARTMENT OF HAZARDOUS COMMUNICATIONS		DATE PREPARED: June 2012						
II - HAZARDOUS INGREDIENTS				VIII - SPECIAL PROTECTION INFORMATION				
PRINCIPLE HAZARDOUS COMPONENT(S) (CHEMICAL NAMES)		CAS NO	ACGIH TLV	OSHA PEL	% or RANGE			
Sodium Chlorite		7758-19-2	NE	NE	0.17			
Chlorine Dioxide		10049-04-4	0.1 ppm	0.1 ppm	Trace			
III - PHYSICAL DATA				<p>RESPIRATORY: For fogging or spraying applications may require worker respiratory protection, such as NIOSH/MSHA approved air purifying respirators or NIOSH/MSHA approved canister/cartridge facial respirators rated for chlorine/acid vapors or specified for chlorine dioxide</p>				
BOILING POINT (°F): 213°F		SPECIFIC GRAVITY (H ₂ O = 1): 1.01 g/ml						
VAPOR PRESSURE (mm Hg): 23.7 MM Hg (25°C)		MELTING POINT: N/A		<p>SKIN: Wear imperious/rubber gloves</p>		<p>PROTECTIVE GLOVES: Recommended - Rubber, neoprene or other chemically impervious gloves</p>		
VAPOR DENSITY (Air = 1): 0.02 kg/m ³		EVAPORATION RATE (H ₂ O = 1): Comparable to water						
pH: 8.0		APPEARANCE AND ODOR: Clear liquid with very faint chlorinous odor		<p>OTHER: Product should be stored and applied in close proximity to a safety shower, chemical eye wash station, or other fresh water source.</p>				
SOLUBILITY IN WATER: Complete								
IV - FIRE AND EXPLOSION HAZARD DATA				<p>VENTILATION REQUIREMENTS: Open air or good ventilation is normally adequate for safe use of this product. Avoid breathing any vapors or fumes resulting from acid activation.</p>				
FLAMMABILITY as per CPSC FLAME EXTENTION TEST: None to solution boiling point								
<p>SPECIAL FIRE FIGHTING PROCEDURES: Do not allow ECOTREAT solutions to evaporate to dryness. If chlorine dioxide gas is produced, vent to atmosphere. Open or vent large containers of ECOTREAT.</p> <p>UNUSUAL FIRE AND EXPLOSION HAZARDS: The sodium chlorite in dried ECOTREAT solution is a strong oxidizer, which supports combustion. Chlorine dioxide, which may evolve from ECOTREAT solutions, is explosive in the gaseous phase at concentrations greater than 10% by volume. Do not allow chlorine dioxide gas to accumulate within a confined space.</p>				IX - SPECIAL PRECAUTIONS				
				<p>PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store at ambient temperature, keep from freezing.</p>				
V - REACTIVITY DATA				<p>SPECIAL PRECAUTIONARY STATEMENTS: Keep this and all chemicals out of reach of children.</p>				
CHEMICAL STABILITY		UNSTABLE	STABLE					<p>NOTICE: We believe that the information contained on this material safety data sheet is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily nor fully adequate in every circumstance. Also, the suggestions should not be confused with nor followed in violation of applicable laws, regulations, rules or insurance requirements. No warranty, expressed or implied, of merchantability fitness or otherwise is made.</p>
		X	CONDITIONS TO AVOID: Avoid strong product under conditions in which it could evaporate to crystalline salt.		X - REGULATORY INFORMATION AND REFERENCES			
INCOMPATIBILITY (Materials to avoid): Avoid accidental contact with acids, chlorine compounds, hypochlorites (bleach), sulfur and sulfite compounds, phosphorus, organic solvents, and combustible/flammable materials.								
HAZARDOUS DECOMPOSITION PRODUCTS: Exposure to acids or chlorine compounds can produce uncontrolled generation of chlorine dioxide gas.				<u>SARA Title III Reporting Requirements</u>				
HAZARDOUS POLYMERIZATION		MAY OCCUR	WILL NOT OCCUR	<p>302 304/CERCLA 311 312 313 DOT</p> <p>(Extremely Hazardous Substances): Reporting not required. (Spills Notification): Not required. Community Right-To-Know, RTK): Reporting not required. (RTK Inventory Data): Reporting required for chlorine dioxide. (Emissions and Releases): Reporting not required. NOT HAZARDOUS</p>				
		X	CONDITIONS TO AVOID:					
VI - HEALTH HAZARD AREA				<p style="text-align: center;"><u>References</u></p> <p>TOXIC SUBSTANCE CONTROL CT LIST (TSCA) - INGREDIENTS LISTED PERMISSIBLE EXPOSURE REFERENCES: Registry of Toxic Effects of Chemical Substances. Title 29 Code of Federal Regulations. National Toxicology Program (NTP) Report on Carcinogens. International Agency for Research on Cancer (IARC) Monographs. Title 40 Code of Federal Regulations</p> <p>REGULATORY STANDARDS: DOT Title 49 Code of Federal Regulations 172.101 SARA Title III Nuclear Regulatory Commission</p>				
ROUTE(S) OF ENTRY:		EYES Yes	SKIN Yes					INGESTION Yes
EFFECTS OF OVER EXPOSURE:				<p>YES: ECOTREAT has been given an EPA Category III rating as a mild irritant. Exposure can produce slight irritation of conjunctive, cornea, and eyelid.</p>				
INHALATION: Acute inhalation: LC (50) .5.61 mg/l. Prolonged inhalation of fog or mist containing ECOTREAT may be irritating to nose and throat.								
SKIN CONTACT/ABSORPTION: Ecotreat is listed as "practically not an irritant". Prolonged exposure may produce localized irritation, contact dermatitis, mild erythema, and edema. Highly unlikely to be absorbed through skin in toxic amounts.				<p>CARCINOGENICITY: NTP? Not listed IARC MONOGRAPHS? Not listed OSHA REGULATED? II for exposure limits</p>				
INGESTION: Ingestion may produce gastric discomfort, nausea, vomiting, and diarrhea. Intake of large quantities may produce methemoglobinemia.								
EMERGENCY AND FIRST AID PROCEDURES:				<p>EMERGENCY AND FIRST AID PROCEDURES: EYES AND SKIN: EYES - Flush thoroughly with water, making certain eyelids are held open. If irritation or burning persists, seek medical attention. SKIN - Wash affected area thoroughly with soap and water. Remove contaminated clothing and rinse thoroughly with water before laundering or discard. If irritation occurs, seek medical attention. INHALATION: Inactivated ECOTREAT normally has no respiratory effects. If exposure to chlorine dioxide produced from activation occurs, remove victim to fresh air. Contact physician if respiratory distress continues INGESTION: DO NOT INDUCE VOMITING. Contact a physician or Poison Control Center IMMEDIATELY.</p>				
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