

# MATERIAL SAFETY DATA SHEET (MSDS)

<b>TROY CHEMICAL CORP.</b> 1 Avenue L Newark, NJ 07105	<b>FOR MSDS INFORMATION: (973) 589-2500</b> <b>24 HOUR EMERGENCY PHONE NUMBER</b> <b>CHEMTREC 1-800-424-9300</b>	<b>Grotan®</b> <b>Product Code:</b> 530X <b>Effective Date:</b> April 24, 2008 <b>Replaces:</b> June 2, 2005
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<b>1. PRODUCT &amp; COMPANY IDENTIFICATION</b>			
<b>PRODUCT NAME</b>	Grotan®		
<b>CHEMICAL NAME</b>	Not applicable		
<b>CHEMICAL FAMILY</b>	Not applicable		
<b>FORMULA</b>	Proprietary		
<b>SYNONYMS</b>	None		
		<b>MANUFACTURER</b>	Troy Chemical Corporation 1 Avenue L Newark, N.J. 07105

  

<b>2. COMPOSITION/INFORMATION ON INGREDIENTS</b>				
The listed components are considered to be hazardous based on OSHA's Hazard Communication Standard. For further regulatory information, see Section 15.				
<b>CHEMICAL NAME</b>	<b>CAS#</b>	<b>%</b>	<b>AGENCY</b>	<b>EXPOSURE LIMITS</b>
Hexahydro-1,3,5-tris(2-hydroxyethyl)-s-triazine	4719-04-4	78.5	Not applicable	None established
<b>OSHA Regulatory Status:</b> This product is classified as hazardous under OSHA regulations.				

  

<b>3. HAZARDS IDENTIFICATION</b>	
<b>EMERGENCY OVERVIEW</b>	
Grotan® is a water white to pale yellow viscous liquid with a mild characteristic odor. Highly alkaline, pH=10.8. May be harmful if swallowed. May cause severe eye irritation and irreversible corneal damage. Excessive heat greater than 147°C (297°F), will result in decomposition to formaldehyde. Avoid contamination of streams and sewers.	
<b>ROUTES OF ENTRY</b>	Ingestion, skin contact, eyes, inhalation
<b>INGESTION</b>	Ingestion may cause gastrointestinal irritation, nausea, and vomiting.
<b>SKIN</b>	May cause mild skin irritation.
<b>EYE CONTACT</b>	May cause moderate to severe eye irritation and irreversible corneal damage if not washed from eyes promptly.
<b>INHALATION</b>	May cause respiratory irritation.
<b>CHRONIC EFFECTS</b>	There are no known or reported chronic effects.
<b>TARGET ORGANS</b>	None
<b>CARCINOGENICITY</b>	This product (or component) is not listed as a carcinogen according to OSHA, NTP, IARC, and ACGIH.
<b>MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE</b>	
There are no known conditions aggravated by exposure to this product.	

  

<b>4. FIRST AID MEASURES</b>	
<b>INGESTION</b>	Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
<b>SKIN CONTACT</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
<b>EYE CONTACT</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
<b>INHALATION</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
<b>NOTES TO PHYSICIAN</b>	This product is highly alkaline, pH=10.8. Probable mucosal damage may contraindicate use of gastric lavage.

  

<b>5. FIRE FIGHTING MEASURES</b>	
<b>FLASH POINT</b>	Not applicable
<b>FLAMMABLE LIMITS</b>	Not applicable
<b>AUTOIGNITION TEMPERATURE</b>	Not applicable
<b>FLAMMABILITY CLASS</b>	Non-hazardous
<b>HAZARDOUS PRODUCTS OF COMBUSTION</b>	Carbon monoxide, carbon dioxide, and formaldehyde.
<b>FIRE EXTINGUISHING MEDIA</b>	Extinguish using agent suitable for surrounding fire.
<b>FIRE FIGHTING INSTRUCTIONS</b>	Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Avoid breathing vapors, keep upwind. Positive pressure self-contained breathing apparatus with full facepiece and structural firefighters' protective clothing will provide limited protection.
<b>UNUSUAL FIRE &amp; EXPLOSION HAZARDS</b>	Contact may cause burns to eyes. Runoff from fire control or dilution water may cause pollution. Excessive heat in excess of 147°C (297°F) will result in decomposition to formaldehyde.

  

<b>6. ACCIDENTAL RELEASE MEASURES</b>	
Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. Wear protective equipment as specified in Section 8. Positive pressure self-contained breathing apparatus and structural firefighters' protective clothing will provide limited protection. Shut off ignition sources; no flares, smoking, or flames in hazard area. Stop leak if you can do it without risk. For small spills, absorb with vermiculite or other noncombustible absorbent material and place into containers for later disposal. For large spills, dike far ahead of liquid spill for later disposal. If water pollution occurs, notify the appropriate authorities. <b>Observe all Federal, State, and Local regulations regarding notifications of accidental releases.</b>	

  

<b>7. HANDLING &amp; STORAGE</b>	
Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or mist. Wash thoroughly after handling. Keep container tightly closed. Use only with adequate ventilation. Store away from incompatible substances in a cool, dry, ventilated area. Prolonged contact with brass, copper, or aluminum piping, containers or equipment should be avoided to prevent possible corrosive effects to these metals. Do not contaminate water, food, or feed by storage or disposal. <b>Observe all Federal, State, and Local regulations when storing or disposing of this substance.</b>	

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## 8. PERSONAL PROTECTION/EXPOSURE CONTROLS

<b>VENTILATION</b>	Provide adequate ventilation or local exhaust to minimize exposure.
<b>EYE/FACE PROTECTION</b>	If potential for contact with liquid exists, use splash-proof safety goggles or other approved eye protection.
<b>SKIN PROTECTION</b>	Direct contact may cause mild skin irritation. Wear impervious gloves and apron to prevent skin contact.
<b>RESPIRATORY PROTECTION</b>	Whenever workplace conditions warrant the use of a respirator, a respiratory protection program meeting OSHA 1910.134 must be followed utilizing a NIOSH/MSHA-approved respirator.
<b>OTHER</b>	Eyewash and safety shower should be available within the immediate work area for emergency use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE</b>	Water white to pale yellow viscous liquid	<b>SPECIFIC GRAVITY AT 25°C. (Water=1)</b>	1.145-1.16
<b>ODOR</b>	Mild characteristic odor	<b>WATER SOLUBILITY</b>	Soluble
<b>INITIAL BOILING POINT</b>	100°C (212°F)	<b>pH AT 25°C.</b>	10.3-11.3
<b>VAPOR PRESSURE AT 20°C.</b>	Unknown	<b>EVAPORATION RATE (Butyl acetate=1)</b>	<1
<b>VAPOR DENSITY (Air=1)</b>	>1	<b>% VOLATILES BY WEIGHT</b>	21%
<b>VISCOSITY (Gardner) AT 25°C.</b>	Not determined		

## 10. STABILITY & REACTIVITY

<b>REACTIVITY</b>	Stable under normal temperatures and pressures.
<b>CONDITIONS TO AVOID</b>	Avoid heat or sources of ignition.
<b>INCOMPATIBILITY</b>	Avoid contact with strong acids, bases, and oxidizers.
<b>HAZARDOUS DECOMPOSITION</b>	Decomposition may release carbon monoxide, carbon dioxide, and formaldehyde.
<b>HAZARDOUS POLYMERIZATION</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>ACUTE ORAL EFFECTS</b> LD50 (oral, rat) - 535-580 mg/kg	
<b>ACUTE SKIN EFFECTS</b> LD50 (dermal, rabbit) >2000 mg/kg. Mild skin irritation.	
<b>ACUTE EYE EFFECTS</b> Moderate to severe irritation (rabbit). Corneal damage may be irreversible if not washed from eyes promptly.	
<b>ACUTE INHALATION EFFECTS</b> No data available.	
<b>SUBCHRONIC EFFECTS AND OTHER STUDIES</b> Skin sensitization reactions associated with this product have been reported. However, the number of sensitization responses is very low. There is also information that allergic sensitivity, if it occurs, is lost at a fairly rapid rate. In animal inhalation studies, exposure to aerosol mists from cutting fluid solutions containing 0.15% and 1.5% Grotan (plus 3% cutting oil and water) resulted in eye irritation and lung damage. It was not established if the lung damage was related to the exposure to Grotan. Mutagenicity testing - Not mutagenic. For additional information on active ingredients, contact Troy Chemical Corporation.	

## 12. ECOLOGICAL INFORMATION

<b>ECOTOXICITY</b> This product is harmful to aquatic organisms. Do not apply directly to water or wetlands. Do not contaminate water when disposing of equipment washwaters.	
	LC50 (bluegill sunfish, adult) - 44.8 mg/l
	LC50 (bluegill sunfish, Fingerlings) - 27 mg/l
	LC50 (rainbow trout) - 67.3 mg/l

## ENVIRONMENTAL FATE

This product may cause adverse environmental impact. Avoid contamination of streams and sewers.

## 13. DISPOSAL INFORMATION

<b>RCRA HAZARDOUS WASTE</b>	This product is not a RCRA hazardous waste by definition.
<b>WASTE DISPOSAL PROCEDURE</b>	The user of this material has the responsibility to dispose of unused material, residues, and containers in compliance with all Federal, State, and Local Regulations

## 14. TRANSPORTATION INFORMATION

### DOT, IATA, IMDG

This product does not meet the definition of any hazard class and therefore is not subject to DOT, IATA, and IMDG Regulations.

## 15. REGULATORY INFORMATION

### CERCLA SECTION 103 (40CFR302.4)

This product does not contain any chemicals that are reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

### SARA SECTION 302 (40CFR355.30), SARA SECTION 304 (40CFR355.40)

This product does not contain any chemicals that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on Reportable Quantities (RQ).

### SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21)

<b>ACUTE</b>	<b>CHRONIC</b>	<b>FIRE</b>	<b>REACTIVE</b>	<b>PRESSURE</b>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### SARA SECTION 313 (40CFR372.65)

This product does not contain any chemicals subject to the reporting requirements of the Emergency Planning and Community Right-to-Know Act of 1986

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Newark, NJ 07105

**FOR MSDS INFORMATION: (973) 589-2500**  
**24 HOUR EMERGENCY PHONE NUMBER**  
**CHEMTREC 1-800-424-9300**

**Grotan®**
**Product Code: 530X**
**Effective Date: April 24, 2008**
**Replaces: June 2, 2005**
**CHEMICAL INVENTORIES**

The ingredients of this product are all on the following Chemical Substance Inventories, are exempt from the inventories, or are otherwise compliant with inventory requirements of the governing agency.

<b>TSCA</b> <input checked="" type="checkbox"/> U.S.	<b>EINECS</b> <input checked="" type="checkbox"/> Europe	<b>DSL/NDSL</b> <input checked="" type="checkbox"/> Canada	<b>AICS</b> <input checked="" type="checkbox"/> Australia	<b>ECL</b> <input checked="" type="checkbox"/> Korea	<b>MIT/ENCS</b> <input checked="" type="checkbox"/> Japan	<b>PICCS</b> <input checked="" type="checkbox"/> Philippines
<b>IECSC</b> <input checked="" type="checkbox"/> China	<b>NZIoC</b> <input checked="" type="checkbox"/> New Zealand					

**CALIFORNIA PROPOSITION 65**

This product does not contain any substances that are currently on the list of Known Carcinogens and Reproductive Toxins, at levels which would require a warning under the statute.

**STATE RIGHT-TO-KNOW**

This product is regulated by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and is exempt from State Right-to-Know labeling requirements when labeled with an approved EPA label.

EPA Registration No. 365-76

**16. OTHER**
**REVISIONS**

Prepared by: Environmental and Regulatory Affairs Dept.

This MSDS has been revised in the following sections: (revisions indicated in left border)

Product Code, Sect. 1 (Added ®), Sect. 4 (First Aid Measures), Sect. 8 (Ventilation, Eye/Face & Respiratory Protection), Sect. 11 (Subchronic Effects), Sect. 12 (Ecotoxicity).

**ABBREVIATIONS**

**PNOC** - Particulates not otherwise classified

**PNOR** - Particulates not otherwise regulated

**STEL** - Short-term exposure limit

**TLV** - Threshold limit value

**TWA** - Time-weighted average

**HMIS RATING**

HEALTH	FLAMMABILITY	REACTIVITY	PERSONAL PROTECTION
3	0	1	D

**NFPA RATING**

HEALTH	FLAMMABILITY	REACTIVITY
3	0	1

The information contained in this MSDS is believed to be accurate and reliable as of issue date, but no representation, guarantee, or warranty, express or implied is made to the accuracy, reliability, or completeness of the information. It is provided for the purpose of complying with hazard communication regulations. It is not intended as performance information or specifications for the product. It is the user's responsibility to determine the suitability of the product for his own use. Troy does not assume legal responsibility for reliance on information herein.

Grotan® is a trademark of Troy Corporation

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