

PRODUCT: TRIPLE C #541

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: Triple C #541

MATERIAL USE: Cooling Tower Inhibitor Treatment

EMERGENCY PHONE NUMBER: (613)-996-6666

SECTION 02: HAZARDS IDENTIFICATION

SIGNAL WORD: DANGER

HAZARD CLASSIFICATION: Corrosive to Metals - Category 1.
Skin Corrosion/Irritation - Category 1.
Serious Eye Damage/Irritation - Category 1.

HAZARD STATEMENT: **H290:** May be corrosive to metals.
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.

PRECAUTIONARY STATEMENT: **P234:** Keep only in original container.
P260: Do not breathe mist or vapour.
P264: Wash skin thoroughly after handling.
P280: Wear protective gloves, protective clothing and eye protection or face protection.
P301+ P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+ P361+ P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.
P304+ P340: IF INHALED: Remove victim 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.
P310: Immediately call a POISON CENTER or physician.
P321: Specific treatment - see information on this label.
P363: Wash contaminated clothing before reuse.
P390: Absorb spillage to prevent material damage.
P405: Store locked up.
P406: Store in corrosive resistant/container with a resistant inner liner.
P501: Dispose of contents/container to an approved waste disposal plant.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC): None.

ADDITIONAL INFORMATION: None.

SECTION 03: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS #	WT. %
Potassium Hydroxide	1310-58-3	10 - 15

Definitions:

CAS - Chemical Abstract Service registry number.

WT. % - Percent Weight.

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SECTION 04: FIRST AID MEASURES

GENERAL ADVICE:	Move out of dangerous area. Perform first aid measures as indicated. Seek immediate medical attention and show this safety data sheet to attending physician.
IF INHALED:	Move to fresh air and keep at rest in a position comfortable for breathing. If breathing difficulty occurs or persists seek immediate medical attention.
IN CASE OF SKIN CONTACT:	Immediately flush exposed skin with water for at least 15 minutes while removing contaminated clothing and/or shoes. Seek immediate medical attention.
IN CASE OF EYE CONTACT:	Immediately flush eyes with water for at least 15 minutes, lifting the upper and lower eyelids intermittently. Check for and remove any contact lenses if easy to do. Seek immediate medical attention.
IF SWALLOWED:	Rinse mouth with water. Do not induce vomiting. Seek immediate medical attention.
THE MOST IMPORTANT SYMPTOMS AND EFFECTS, WHETHER ACUTE OR DELAYED:	No Information Available.
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:	No Information Available.

SECTION 05: FIRE FIGHTING MEASURES

FLAMABILITY:	See Section 16 - Other Information.
SUITABLE EXTINGUISHING MEDIA:	Use extinguishing media suitable for surrounding fire or source of fire. Use water spray to cool fire exposed containers.
UNSUITABLE EXTINGUISHING MEDIA:	No Information Available.
SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:	No Information Available.
PRECAUTIONS FOR FIREFIGHTERS::	No Information Available.
FIREFIGHTING INSTRUCTIONS:	No Information Available.
PROTECTION DURING FIREFIGHTING:	Wear full protective gear and full face pressure demand self-contained breathing apparatus.
OTHER INFORMATION:	No additional information available.

SECTION 06: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Avoid direct contact with skin, eyes and clothing. Avoid inhalation of mist, vapor or dust. Wear appropriate personal protective equipment as outlined in Section 8 of this SDS.
ENVIRONMENTAL PRECAUTIONS:	Prevent further leakage or spillage if safe to do so. Contain spilled material and prevent run-off onto ground or into water sources or sewers.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP:	Neutralize with appropriate acidic material if possible. Absorb on inert material and place in containers for disposal. Dispose of spilled/collected material in accordance with all federal, state and local regulations.

SECTION 07: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:	Avoid contact with skin and eyes. Avoid inhalation of mist, vapor and dust. Ensure adequate ventilation. Do not eat, drink or smoke while handling. Wear appropriate personal protective equipment as outlined in Section 8 of this SDS.
CONDITIONS FOR SAFE STORAGE:	Store in original container. Keep container tightly closed. Store at room temperature (10-32.2°C (50-90°F) in a dry well-ventilated area.

SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT(S)	DATA SOURCE	EXPOSURE FORM	EXPOSURE VALUE	EXPOSURE NOTES
Potassium Hydroxide	Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL)	Time Weighted Average (TWA)	3 mg/m ³	-

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SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:	Use local and/or general exhaust ventilation to maintain air born concentrations below irritating levels or exposure limits. An eyewash and safety shower should be available in the work area.
EYE/FACE PROTECTION:	Safety glasses or chemical goggles should be worn when handling this material.
SKIN AND BODY PROTECTION:	Hand Protection: Wear chemical resistant gloves when handling.
RESPIRATORY PROTECTION:	Wear respiratory protection if mist or vapor is produced, while using this material
GENERAL HYGIENE CONSIDERATIONS:	Follow good hygiene and safety practice. Wash hands and exposed skin before breaks and at the end of the work day. Do not eat, drink or smoke while handling this material. Do not wear contaminated or dirty clothing home from the work-site. Launder contaminated or dirty clothing before reuse.
OTHER/TYPE:	Wear chemical resistant apron when handling.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Light Amber Liquid.
ODOUR:	Mild.
ODOUR THRESHOLD:	No Data Available.
pH:	13.5.
MELTING POINT/FREEZING POINT:	No Data Available.
INITIAL BOILING POINT:	No Data Available.
FLASH POINT:	No Data Available.
EVAPORATION RATE:	No Data Available.
FLAMMABILITY (SOLIDS AND GASES):	No Data Available.
LOWER FLAMMABILITY LIMIT:	No Data Available.
UPPER FLAMMABLE LIMIT:	No Data Available.
LOWER EXPLOSIVE LIMIT:	No Data Available.
UPPER EXPLOSIVE LIMIT:	No Data Available.
VAPOUR PRESSURE:	No Data Available.
VAPOUR DENSITY:	No Data Available.
RELATIVE DENSITY:	No Data Available.
SPECIFIC GRAVITY:	1.19.
SOLUBILITY IN WATER:	Complete.
AUTO IGNITION TEMPERATURE:	No Data Available.
PARTITION COEFFICIENT N-OCTANOL/WATER:	No Data Available.
DECOMPOSITION TEMPERATURE:	No Data Available.
VISCOSITY:	No Data Available.
DENSITY:	No Data Available.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	Not reactive under normal use conditions.
CHEMICAL STABILITY:	Material is stable under normal handling and storage conditions.
POSSIBILITY OF HAZARDOUS REACTIONS:	Hazardous polymerization will not occur.
CONDITIONS TO AVOID:	Avoid excessive heating, freezing and chemical contamination.
INCOMPATIBLE MATERIALS:	Avoid contact with oxidizers and strong acids.
DECOMPOSITION PRODUCTS:	No decomposition products are expected under normal storage and handling conditions.

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SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON THE LIKELY ROUTES OF EXPOSURE:

INHALATION:	No Information Available.
SKIN CONTACT:	This material is corrosive and can cause severe, permanent damage.
EYE CONTACT:	This material is irritating and corrosive to the eyes and can cause serious injury and permanent eye damage.
INGESTION:	No Information Available.
SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:	No Information Available.
DELAYED AND CHRONIC EFFECTS:	There are no known effects of chronic exposure other than those experienced through acute exposure.

NUMERICAL MEASURES OF TOXICITY:

INGREDIENT(S)	EXPOSURE	SPECIES	DOSE	NOTES
Potassium Hydroxide				No Information Available

ACUTE TOXICITY:	Mixture - No Information Available.
SKIN CORROSION / IRRITATION:	Mixture - Corrosive to skin.
SERIOUS EYE DAMAGE / EYE IRRITATION:	Mixture - Corrosive to the eyes.
RESPIRATORY OR SKIN SENSITIZATION:	Mixture - No Information Available.
SKIN SENSITIZATION:	Mixture - No Information Available.
GERM CELL MUTAGENICITY:	Mixture - No Information Available.
CARCINOGENICITY:	Mixture - This product is considered to be a potential carcinogen by: National Toxicology Program (NTP) - No. OSHA - No. International Agency for Research on Cancer (IARC) - No.
REPRODUCTIVE TOXICITY:	Mixture - This product is not expected to cause reproductive and developmental effects.
SPECIFIC TARGET ORGAN TOXICITY (STOT)- SINGLE EXPOSURE:	Mixture - No Information Available.
STOT - REPEAT EXPOSURE:	Mixture - No Information Available.
ASPIRATION HAZARD:	Mixture - This product is not an aspiration hazard.
ADDITIONAL INFORMATION:	None.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: No Information Available.

INGREDIENT(S)	EXPOSURE	SPECIES	DOSE	NOTES
Potassium Hydroxide:				No Information Available

PERSISTENCE AND DEGRADABILITY:	Mixture - No Information Available.
BIOACCUMULATIVE POTENTIAL:	Mixture - No Information Available.
MOBILITY IN SOIL:	Mixture - No Information Available.
OTHER ADVERSE EFFECTS:	Mixture - No Information Available.
ADDITIONAL INFORMATION:	No Information Available.

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SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:	Dispose of material in accordance with all federal, state and local regulations.
CONTAMINATED PACKAGING:	Triple rinse container and offer for recycling. Dispose of container following all federal, state and local regulations.
ADDITIONAL INFORMATION:	No additional information available.

SECTION 14: TRANSPORT INFORMATION

Transportation of Dangerous Goods (TDG):	Regulated.
United States (US) Department of Transportation (DOT):	Regulated.
UNITED NATIONS (UN) NUMBER:	3266
PROPER SHIPPING NAME:	UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (POTASSIUM HYDROXIDE), 8, PG II.
TRANSPORT HAZARD CLASS:	8.
SUBSIDIARY RISK	None.
PACKING GROUP:	II
PACKAGING EXCEPTIONS:	None.

SECTION 15: REGULATORY INFORMATION

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) CLASSIFICATION:	E.
HAZARDOUS PRODUCT REGULATIONS (HPR) COMPLIANCE:	This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.
Canadian Ingredient Disclosure List Substances:	None Listed.
UNITED STATES (US) FEDERAL REGULATIONS:	
<i>Superfund Amendments and Reauthorization Act (SARA):</i>	<ul style="list-style-type: none"> • Immediate (Acute) Health Hazard. • Reactivity Hazard. <p>SARA 302 Extremely Hazardous Substance: Not listed. SARA 304 Emergency Release Notification: Not regulated. SARA 311/312 Hazardous Chemical: No. SARA 313 Toxic Release Inventory (TRI) Report: Not regulated.</p>
Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA):	This chemical is not a pesticide product.
<i>Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):</i>	None Listed.
<i>Clean Air Act Regulated Substances:</i>	None.
<i>Clean Water Act Regulated Substances:</i>	None.
US STATE OR LOCAL REGULATIONS:	None.

SECTION 16: OTHER INFORMATION

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS) Hazard ID:

HEALTH	3
FLAMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	C

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *-Chronic health effect

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SECTION 16: OTHER INFORMATION

National Fire Protection Association (NFPA):



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

PREPARED BY: T Donovan & Son (1997) Ltd.
PREPARATION DATE: May 2018

DISCLAIMER:

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. Regulatory requirements are subject to change and may differ between various locations. The information given is designed only as 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.