

PRODUCT: TRIPLE C #455

**SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**MANUFACTURER:** T. DONOVAN & SON (1997) LTD.  
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SAINT JOHN, NEW BRUNSWICK  
CANADA E2M 3V2  
TOLL FREE: 1-888-799-2645 / LOCAL (506) 642-1500

**PRODUCT NAME:** Triple C #455

**CHEMICAL FORMULA:**  $K_4P_2O_7$

**CHEMICAL FAMILY:** Phosphoric Acid Salt

**MATERIAL USE:** Water Treatment.

**EMERGENCY PHONE NUMBER:** (613)-996-6666

**SECTION 02: HAZARDS IDENTIFICATION**

**SIGNAL WORD:** WARNING.

**HAZARD CLASSIFICATION:** Acute Toxicity Oral - Category 4.  
Eye Irritation - Category 2A.

**HAZARD STATEMENT:** **H302:** Harmful if swallowed.  
**H319:** Causes serious eye irritation.

**PRECAUTIONARY STATEMENT:** **P264:** Wash thoroughly after handling.  
**P270:** Do not eat, drink or smoke when using this product.  
**P280:** Wear eye/face protection.  
**P305+P351+P338:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**P337+P313:** If eye irritation persists: Get medical advice/attention.  
**P301+P312:** IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician if you feel unwell.  
**P330:** Rinse mouth.  
**P501:** Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**OTHER HAZARDS:** None.

**SECTION 03: COMPOSITION/INFORMATION ON INGREDIENTS**

INGREDIENT(S)	CAS #	WT. %
Diphosphoric acid, sodium salt (1:4)	7722-88-5	10 - 20

Definitions:

CAS - Chemical Abstract Service registry number.

WT. % - Percent Weight.

**SECTION 04: FIRST AID MEASURES**

**IF INHALED:** Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

**IN CASE OF SKIN CONTACT:** Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

PRODUCT: TRIPLE C #455

**SECTION 04: FIRST AID MEASURES**

<b>IN CASE OF EYE CONTACT:</b>	Flush eyes with water for at least 15 minutes while holding eyelids open. Remove contact lenses if worn. Seek immediate medical attention, preferably with an ophthalmologist. If the physician is not immediately available, eye irrigation should be continued for an additional 15 minutes. If it is necessary to transport the patient to a physician and the eye needs to be bandaged, use a dry sterile cloth pad and cover both eyes.
<b>IF SWALLOWED:</b>	Do NOT induce vomiting. If swallowed give 2-3 glasses of water if victim is conscious and alert. Do not give anything by mouth to an unconscious person. Rinse mouth. Obtain medical attention immediately if ingested. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Persons attending the victim should avoid direct contact with heavily contaminated clothing and vomitus. Wear impervious gloves while decontaminating skin and hair.
<b>THE MOST IMPORTANT SYMPTOMS AND EFFECTS, WHETHER ACUTE OR DELAYED:</b>	Refer to Section 11 - Toxicological Information.
<b>NOTES TO PHYSICIAN:</b>	All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.
<b>OTHER INFORMATION:</b>	Call 911 or emergency medical service. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

**SECTION 05: FIRE FIGHTING MEASURES**

<b>FLAMMABILITY:</b>	Not combustible.
<b>SUITABLE EXTINGUISHING MEDIA:</b>	Use extinguishing media suitable for surrounding fire.
<b>HAZARDOUS COMBUSTION PRODUCTS:</b>	None Known.
<b>SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:</b>	None Known.
<b>ADVICE FOR FIREFIGHTERS:</b>	Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection. For LARGE FIRES: Move containers from fire area if you can do it without risk; Do not scatter spilled material with high pressure water streams and; Dike fire-control water for later disposal.

**SECTION 06: ACCIDENTAL RELEASE MEASURES**

<b>PERSONAL PRECAUTIONS:</b>	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not walk through spilled material.
<b>EMERGENCY PROCEDURES:</b>	Keep unauthorized personnel away. Ventilate closed spaces before entering.
<b>ENVIRONMENTAL PRECAUTIONS:</b>	Do not flush to drain. If spilled on the ground, the affected area should be scraped clean and placed in an appropriate container for disposal. Prevent material from entering public sewer system or any waterways. Spills may be reportable to the National Response Center (800-424-8802) and to Federal, Provincial, and/or local agencies.
<b>METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP:</b>	<ul style="list-style-type: none"><li>• Avoid generating dust.</li><li>• SMALL DRY SPILLS: With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.</li><li>• Clean up residual material by washing area with water. Collect washings for disposal.</li><li>• Decontaminate tools and equipment after cleanup.</li><li>• LARGE SPILLS: Cover powder spill with plastic sheet or tarp to minimize spreading.</li></ul>
<b>REFERENCE TO OTHER SECTIONS:</b>	Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

**PRODUCT: TRIPLE C #455**

**SECTION 07: HANDLING AND STORAGE**

**PRECAUTIONS FOR SAFE HANDLING:** Keep containers closed when not in use. Do not breathe (dust, vapor or spray mist) Do not get on skin or in eyes. Do not ingest. Do not use in areas without adequate ventilation. Do not use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.

**CONDITIONS FOR SAFE STORAGE:** Store in a tightly closed container. Store in an area that is sanitary, dry, well-ventilated, cool, isolated from all toxic and harmful substances, away from ignition sources.

**SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION**

INGREDIENT(S)	ACGIH TLV		OSHA PEL		NIOSH / REL
	TWA	STEL	TWA	STEL	TWA
Tetrasodium Pyrophosphate as Particulates not otherwise classified (PNOC)	10 mg/m <sup>3</sup> TWA (inhalable particles, recommended);	-	15 mg/m <sup>3</sup> TWA (total dust);	-	-
	3 mg/m <sup>3</sup> TWA (respirable particles, recommended) as PNOC.	-	5 mg/m <sup>3</sup> TWA (respirable fraction) as PNOC.	-	-

**Definitions:**

ACGIH - American Conference of Governmental Industrial Hygienists. RELs - Recommended Exposure Limits.  
 NIOSH - National Institute for Occupational Safety and Health. STEL - Short-term Exposure Limit.  
 OSHA - Occupational Safety and Health Administration. TLV - Threshold Limit Value.  
 PEL - Permissible Exposure Limit. TWA - Time Weighted Average.

**ENGINEERING CONTROLS:** Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

**RESPIRATORY PROTECTION:** For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

**EYE/FACE PROTECTION:** Wear safety glasses.

**SKIN AND BODY PROTECTION:** Wear appropriate gloves.

**ENVIRONMENTAL EXPOSURE:** Follow best practice for site management and disposal of waste.

**SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES**

**PHYSICAL STATE:** Translucent Liquid.

**ODOUR:** Odourless.

**ODOUR THRESHOLD:** No Data Available.

**PH:** 8 (1% SOLN).

**FREEZING POINT:** 0°C.

**BOILING POINT:** No Data Available.

**FLASH POINT, METHOD:** No Data Available.

**EVAPORATION RATE:** No Data Available.

**FLAMMABILITY (SOLIDS AND GASES):** Not Flammable.

**UPPER FLAMMABLE LIMIT (% BY VOL):** Not Applicable.

**LOWER FLAMMABLE LIMIT (% BY VOL):** Not Applicable.

**VAPOUR PRESSURE:** 0 mmHg (torr)

**VAPOUR DENSITY (AIR=1):** No Data Available.

**SPECIFIC GRAVITY (WATER=1):** 1.05 @ 25°C

**SOLUBILITY IN WATER (% W/W):** Soluble.

PRODUCT: TRIPLE C #455

**SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES**

AUTO IGNITION TEMPERATURE:	No Data Available.
PARTITION COEFFICIENT N-OCTANOL/WATER:	No Data Available.
DECOMPOSITION TEMPERATURE:	No Data Available.
VISCOSITY:	No Data Available.

**SECTION 10: STABILITY AND REACTIVITY**

REACTIVITY:	No Data Available.
CHEMICAL STABILITY:	Stable under normal temperatures and pressures.
POSSIBILITY OF HAZARDOUS REACTIONS:	Hazardous polymerization will not occur.
CONDITIONS TO AVOID:	Dusting Conditions.
INCOMPATIBLE MATERIALS:	No Data Available.
HAZARDOUS DECOMPOSITION PRODUCTS:	None Known.

**SECTION 11: TOXICOLOGICAL INFORMATION**

INGREDIENT(S)	LC50	LD50
Tetrasodium Pyrophosphate	-	> 2000 mg/kg (Skin, <i>Leporidae sp.</i> (Rabbit)) = 4000 mg/kg (Ingestion/Oral, Rat) = 2980 mg/kg (Ingestion/Oral, Mouse) = 2150 mg/kg (Ingestion/Oral, Rat (adult male)) = 1825 mg/kg (Ingestion/Oral, Rat)
Diphosphoric acid, sodium salt (1:4) (100%)	-	4 mg/kg (Oral-Rat) >300 mg/kg (Skin-Rabbit)

**ACUTE TOXICITY**

ORAL LD50:	See Above.
INHALATION LC50:	No Data Available.
DERMAL LD50:	See Above.
SKIN CORROSION / IRRITATION:	Irritation: Rabbit, Result: Essentially Non-Irritating. OSHA Hazard Communication Standard (HCS) 2012, Classification criteria not met.
SERIOUS EYE DAMAGE / EYE IRRITATION:	Irritation: Rabbit, Result: Severe Irritation, Reversible. OSHA HCS 2012, Eye Irritation 2A.
RESPIRATORY OR SKIN SENSITIZATION:	OSHA Hazard HCS 2012, Classification criteria not met.
GERM CELL MUTAGENICITY:	OSHA Hazard HCS 2012, Classification criteria not met.
REPRODUCTIVE TOXICITY:	OSHA Hazard HCS 2012, Classification criteria not met.
SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE:	OSHA Hazard HCS 2012, Classification criteria not met.
STOT - REPEAT EXPOSURE:	OSHA Hazard HCS 2012, Classification criteria not met.
ASPIRATION HAZARD:	OSHA Hazard HCS 2012, Classification criteria not met.
CARCINOGENICITY:	OSHA Hazard HCS 2012, Classification criteria not met.
CARCINOGENIC EFFECTS:	This product does not contain any ingredient designated by International Agency for Research on Cancer (IARC), National Toxicology Program (NTP), ACGIH or OSHA as probable or suspected human carcinogens.
ROUTE(S) OF ENTRY/EXPOSURE:	Inhalation, Skin, Eye, Ingestion.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:	Disorders of the lungs. Skin/Dermal.

PRODUCT: TRIPLE C #455

**SECTION 11: TOXICOLOGICAL INFORMATION**

<b>POTENTIAL HEALTH EFFECTS:</b>	Acute (Immediate): Inhalation: May cause respiratory irritation. Skin: May cause irritation. Eye: May cause severe irritation. May cause redness, burns. Ingestion: Harmful if ingested. May cause burns to mouth and esophagus, nausea, vomiting, and diarrhea. Chronic (Delayed): Inhalation, Skin, Eye, and Ingestion: No data available.
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**SECTION 12: ECOLOGICAL INFORMATION**

<b>PERSISTENCE AND DEGRADABILITY:</b>	No data found for product.
<b>BIOACCUMULATIVE POTENTIAL:</b>	No data found for product.
<b>TOXICITY:</b>	No data found for product.
<b>MOBILITY IN SOIL:</b>	No data found for product.
<b>ECOLOGICAL FATE:</b>	No data found for product.
<b>OTHER ADVERSE EFFECTS:</b>	No data found for product.
<b>OTHER INFORMATION:</b>	No specific biodegradation test data located. While the alkalinity of this material is readily reduced in natural waters, the resulting phosphate may persist indefinitely or incorporate into biological systems.

**SECTION 13: DISPOSAL CONSIDERATIONS**

<b>DISPOSAL METHODS:</b>	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
<b>PACKAGING:</b>	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**SECTION 14: TRANSPORT INFORMATION**

<b>Transportation of Dangerous Goods (TDG):</b>	Not Regulated.
<b>US Department of Transportation (DOT):</b>	Not Regulated.
<b>International Maritime Dangerous Goods (IMDG):</b>	Not Regulated.
<b>International Air Transport Association (IATA):</b>	Not Regulated.
<b>UNITED NATIONS (UN) NUMBER:</b>	Not Applicable.
<b>TRANSPORT HAZARD CLASS:</b>	Not Applicable.
<b>PACKING GROUP:</b>	Not Applicable.
<b>PROPER SHIPPING NAME:</b>	Not Applicable.
<b>SPECIAL SHIPPING INSTRUCTIONS:</b>	No special shipping requirements.

**SECTION 15: REGULATORY INFORMATION**

<b>WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) CLASSIFICATION:</b>	D2B.
<b>WHMIS - Ingredient Disclosure List:</b>	1%.
<b>HAZARDOUS PRODUCT REGULATIONS (HPR) COMPLIANCE:</b>	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.
<b>Canadian Environmental Protection Act (CEPA) - Priority Substance List:</b>	Not Listed.
<b>CANADIAN DOMESTIC SUBSTANCES LIST (DSL):</b>	This material is listed on the Canadian Domestic Substances List.

PRODUCT: TRIPLE C #455

**SECTION 15: REGULATORY INFORMATION**CANADIAN NON-DOMESTIC  
SUBSTANCES LIST (NDSL): Not Listed.UNITED STATES (US) FEDERAL  
REGULATIONS:*Superfund Amendments and  
Reauthorization Act (SARA):* Not Listed.

OSHA HazCom Standard Rating: Not Listed.

*Comprehensive Environmental  
Response, Compensation and Liability  
Act (CERCLA):* Not Listed.*US Toxic Substances Control Act  
(TSCA):* Listed.**SECTION 16: OTHER INFORMATION**

PREPARED BY: T. Donovan &amp; Son (1997) Ltd.

PREPARATION DATE: May 2018

**DISCLAIMER:**

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