

**PRODUCT: TRIPLE C #321**

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

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

**PRODUCT NAME:** Triple C #321

**CHEMICAL FAMILY:** Orthophosphates

**MOLECULAR WEIGHT:** 1560

**MATERIAL USE:** Water Treatment: To precipitate hardness salts and to adjust alkalinity in boiling water. Corrosion control.

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

**SECTION 02: HAZARDS IDENTIFICATION**



**SIGNAL WORD:** DANGER.

**HAZARD CLASSIFICATION:** Skin Irritation - Category 2.  
Serious Eye Damage - Category 1.  
Specific Target Organ Toxicity (STOT) Single Exposure - Category 3: Respiratory Tract Irritation.

**HAZARD STATEMENT:** **H315:** Causes skin irritation.  
**H318:** Causes serious eye damage.  
**H335:** May cause respiratory irritation.

**PRECAUTIONARY STATEMENT:** **P260:** Do not breathe dust.  
**P264:** Wash thoroughly after handling.  
**P271:** Use only outdoors or in a well-ventilated area.  
**P280:** Wear protective gloves/protective clothing/eye protection/face protection.  
**P304+P340:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
**P312:** Call a POISON CENTER or doctor/physician if you feel unwell.  
**P302 + P352:** IF ON SKIN: Wash with plenty of soap and water.  
**P321:** Specific treatment, see supplemental first aid information.  
**P362:** Take off contaminated clothing and wash before reuse.  
**P332+P313:** If skin irritation occurs: Get medical advice/attention.  
**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 doctor/physician.  
**P403+P233:** Store in a well-ventilated place. Keep container tightly closed.  
**P405:** Store locked up.  
**P501:** Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**OTHER HAZARDS:** Under United States Regulations (29 CFR (Code of Federal Regulations) 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

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

INGREDIENT(S)	CAS #	WT. %
Phosphoric Acid, Trisodium Salt, Dodecahydrate	10101- 89-0	100

Definitions:

CAS - Chemical Abstract Service registry number.

WT. % - Percent Weight.

**SECTION 04: FIRST AID MEASURES**

<b>IF INHALED:</b>	Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention.
<b>IN CASE OF SKIN CONTACT:</b>	In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. Wash contaminated clothing before reuse. For minor skin contact, avoid spreading material on unaffected skin. Get medical attention.
<b>IN CASE OF EYE CONTACT:</b>	In case of contact with substance, immediately flush eyes with running water for at least 15 minutes. 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>	If swallowed give 2-3 glasses of water if victim is conscious and alert. Do not give anything by mouth to an unconscious person. Do NOT induce vomiting. Seek immediate medical attention. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.
<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 and take precautions to protect themselves. Keep victim warm and quiet.

**SECTION 05: FIRE FIGHTING MEASURES**

<b>FLAMMABILITY:</b>	Not Flammable.
<b>SUITABLE EXTINGUISHING MEDIA:</b>	Not combustible. Use extinguishing media suitable for surrounding fire.
<b>HAZARDOUS COMBUSTION PRODUCTS:</b>	Oxides of sodium, oxides of phosphorus.
<b>SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:</b>	Unusual Fire and Explosion Hazards: Not combustible. Under fire conditions, toxic, corrosive fumes are emitted.
<b>ADVICE FOR FIREFIGHTERS:</b>	<ul style="list-style-type: none"> <li>Wear positive pressure self-contained breathing apparatus (SCBA).</li> <li>Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.</li> <li>Keep unauthorized personnel away.</li> <li>Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.</li> <li>Persons who may have been exposed to contaminated smoke should be immediately examined by a physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation.</li> </ul>

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**SECTION 06: ACCIDENTAL RELEASE MEASURES**

<b>PERSONAL PRECAUTIONS:</b>	Wear appropriate protective gear for the situation to avoid exposure. Ventilate enclosed areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>EMERGENCY PROCEDURES:</b>	Keep unauthorized personnel away.
<b>ENVIRONMENTAL PRECAUTIONS:</b>	Runoff from fire control or dilution water may cause pollution. Prevent entry into waterways, sewers, basements or confined areas.
<b>METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP:</b>	Sweep or vacuum up and place in an appropriate closed container. Clean up residual material by washing area with water and detergent. Collect washings for disposal.
<b>REFERENCE TO OTHER SECTIONS:</b>	Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

**SECTION 07: HANDLING AND STORAGE**

<b>PRECAUTIONS FOR SAFE HANDLING:</b>	Use only with adequate ventilation. Handle and open container with care. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing dust. Avoid direct or prolonged contact with skin and eyes. Do not ingest. Potentially deadly carbon monoxide gas can form in enclosed areas or tanks when alkaline products contact materials that contain sugars. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.
<b>CONDITIONS FOR SAFE STORAGE:</b>	Keep container tightly closed. Keep away from incompatible materials. Store in an area that is room temperature, well-ventilated and isolated from all toxic and harmful substances.

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

INGREDIENT(S)	ACGIH TLV		OSHA PEL		NIOSH REL
	TWA	STEL	TWA	STEL	
Trisodium phosphate Dodecahydrate	-	10 mg/m <sup>3</sup> STEL	-	-	-

**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.

<b>ENGINEERING CONTROLS:</b>	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>RESPIRATORY PROTECTION:</b>	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.
<b>EYE/FACE PROTECTION:</b>	Wear eye protection. An emergency eye wash must be readily accessible to the work area.
<b>HANDS / SKIN AND BODY PROTECTION:</b>	<ul style="list-style-type: none"> <li>Wear protective gloves -Gloves.</li> <li>Wear protective clothing.</li> </ul>
<b>ENVIRONMENTAL EXPOSURE CONTROLS:</b>	Follow best practice for site management and disposal of waste.

**SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES**

<b>PHYSICAL STATE:</b>	Solid White Granules.
<b>ODOUR:</b>	None.
<b>ODOUR THRESHOLD:</b>	No Data Available.
<b>pH:</b>	11.8.

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**SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES**

<b>MELTING POINT/FREEZING POINT:</b>	No Data Available.
<b>BOILING POINT:</b>	No Data Available.
<b>FLASH POINT, METHOD:</b>	No Data Available.
<b>EVAPORATION RATE:</b>	No Data Available.
<b>FLAMMABILITY (SOLIDS AND GASES):</b>	Not Flammable.
<b>UPPER FLAMMABLE LIMIT (% BY VOL ):</b>	Not Flammable.
<b>LOWER FLAMMABLE LIMIT (% BY VOL):</b>	Not Flammable.
<b>EXPLOSIVE PROPERTIES:</b>	Not Explosive.
<b>OXIDIZING PROPERTIES:</b>	Not an Oxidizer.
<b>VAPOUR PRESSURE:</b>	No Data Available.
<b>VAPOUR DENSITY (AIR=1):</b>	No Data Available.
<b>SPECIFIC GRAVITY (WATER=1):</b>	No Data Available.
<b>SOLUBILITY IN WATER (% W/W):</b>	Soluble.
<b>AUTO IGNITION TEMPERATURE:</b>	No Data Available.
<b>PARTITION COEFFICIENT N-OCTANOL/WATER:</b>	No Data Available.
<b>DECOMPOSITION TEMPERATURE:</b>	No Data Available.
<b>VISCOSITY:</b>	No Data Available.

**SECTION 10: STABILITY AND REACTIVITY**

<b>REACTIVITY:</b>	No dangerous reaction known under conditions of normal use.
<b>CHEMICAL STABILITY:</b>	Stable.
<b>POSSIBILITY OF HAZARDOUS REACTIONS:</b>	Hazardous polymerization will not occur.
<b>CONDITIONS TO AVOID:</b>	Dusting conditions. Moisture. Incompatible materials.
<b>INCOMPATIBLE MATERIALS:</b>	Strong acids, magnesium.
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	Oxides of phosphorus. Oxides of sodium.

**SECTION 11: TOXICOLOGICAL INFORMATION**

<b>INGREDIENT(S)</b>	<b>LC50</b>	<b>LD50</b>
Phosphoric Acid, Trisodium Salt, Dodecahydrate FCC	-	Ingestion/Oral-Rat - 7400 mg/kg

**ACUTE TOXICITY**

<b>ORAL LD50:</b>	See above.
<b>INHALATION LC50:</b>	No Data Available.
<b>DERMAL LD50:</b>	No Data Available.
<b>SKIN CORROSION / IRRITATION:</b>	Irritation: <i>Leporidae sp.</i> (Rabbit) - non-specific severity.
<b>SERIOUS EYE DAMAGE / EYE IRRITATION:</b>	Irritation: Eye-Rabbit - Moderate irritation.
<b>RESPIRATORY OR SKIN SENSITIZATION:</b>	No Data Available.
<b>GERM CELL MUTAGENICITY:</b>	No Data Available.
<b>CARCINOGENICITY:</b>	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.
<b>REPRODUCTIVE TOXICITY:</b>	No Data Available.
<b>SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE:</b>	OSHA HCS 2012 • STOT Single Exposure 3: Respiratory Tract Irritation.
<b>STOT - REPEAT EXPOSURE:</b>	No Data Available.
<b>ASPIRATION HAZARD:</b>	Not Relevant.

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**SECTION 11: TOXICOLOGICAL INFORMATION**

**POTENTIAL HEALTH EFFECTS:**

**INHALATION:** Acute (Immediate) - May cause respiratory irritation.  
 Chronic (Delayed) - No Data Available.

**SKIN:** Acute (Immediate) - Causes skin irritation.  
 Chronic (Delayed) - No Data Available.

**EYE:** Acute (Immediate) - Causes serious eye damage.  
 Chronic (Delayed) - No Data Available.

**INGESTION:** Acute (Immediate) - Causes corrosion, burns to mouth and esophagus, abdominal pain, chest pain, nausea, vomiting, diarrhea, seizures. Aspiration of the swallowed or vomited product can cause severe pulmonary complications.  
 Chronic (Delayed) - No Data Available.

**SECTION 12: ECOLOGICAL INFORMATION**

**TOXICITY:**

**TRISODIUM PHOSPHATE DODECAHYDRATE FCC**

DOSAGE	SPECIES	DURATION	RESULTS	EXPOSURE CONDITIONS
126 mg/L	Water Flea: <i>Daphnia magna</i>	96 Hour(s)	EC50	No Data Available (NDA)
151 mg/L	Fish: Mosquitofish ( <i>Gambusia affinis</i> )	96 Hour(s)	EC50	No Data Available

**PERSISTENCE AND DEGRADABILITY:** 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.

**BIOACCUMULATIVE POTENTIAL:** No data found for product.

**MOBILITY IN SOIL:** No data found for product.

**OTHER ADVERSE EFFECTS:** No data found for product.

**SECTION 13: DISPOSAL CONSIDERATIONS**

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

**PACKAGING:** Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**SECTION 14: TRANSPORT INFORMATION**

**Transportation of Dangerous Goods (TDG):** Not Regulated.

**US Department of Transportation (DOT):** Regulated.

**International Maritime Dangerous Goods (IMDG):** Not Regulated.

**International Air Transport Association (IATA):** Not Regulated.

**UNITED NATIONS (UN) NUMBER:** 3077.

**TRANSPORT HAZARD CLASS:** -

**PACKING GROUP:** III

**PROPER SHIPPING NAME:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Sodium Phosphate, Tribasic).

**SPECIAL SHIPPING INSTRUCTIONS:** None.

**REGULATION SPECIFIC INFORMATION: In Accordance with US DOT:** This product is regulated for transportation because it contains a reportable quantity of 5000 lbs (2270kg). "Hazardous substances" in packages less than the reportable quantity (RQ) are not hazardous substances by US DOT definition (49 CFR 171.8).

**SECTION 15: REGULATORY INFORMATION**

**WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) CLASSIFICATION:** Corrosive - E.  
 Other Toxic Effects - D2B.

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**SECTION 15: REGULATORY INFORMATION**

**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.

**INVENTORY:**

INGREDIENT(S)	Canada Disclosure List (DSL)	Canada Non-Disclosure List (NDSL)	US Toxic Substances Control Act (TSCA)
Phosphoric Acid, Trisodium Salt, Dodecahydrate	No	No	No
Trisodium Phosphate Anhydrous	Yes	No	Yes

**Canadian Environmental Protection Act (CEPA) - Priority Substances List:** Not Listed.

**UNITED STATES (US) FEDERAL REGULATIONS:**

**OSHA Hazcom Standard Rating:** Not Listed.

**Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):** Not Listed.

**SECTION 16: OTHER INFORMATION**

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

**PREPARATION DATE:** May 2018

**DISCLAIMER:**

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