

PRODUCT: TRIPLE C #749

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: T DONOVAN & SON (1997) LTD.
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PRODUCT NAME: TRIPLE C #749

CHEMICAL FORMULA: Na₂S₂O₅

CHEMICAL FAMILY: Anhydrous Sodium Bisulfite Sodium Pyrosulfite ABS.

MOLECULAR WEIGHT: 190.11

MATERIAL USE: Sulfite Oxygen Scavenger Treatment.

EMERGENCY PHONE NUMBER: (613)-996-6666

SECTION 02: HAZARDS IDENTIFICATION



SIGNAL WORD: DANGER.

HAZARD CLASSIFICATION: Acute Toxicity - Category 4 (Oral).
Eye Damage - Category 1.

HAZARD STATEMENT: **H302:** Harmful if swallowed.
H318: Causes serious eye damage.

PRECAUTIONARY STATEMENT: **P264:** Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear eye protection and face protection.
P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330: Rinse mouth.
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.
P501: Dispose of contents and container in accordance with local, Provincial, and Federal regulations.

SECTION 03: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS #	WT. %
Sodium Metabisulfite	7681-57-4	>98

Definitions:

CAS - Chemical Abstract Service registry number.

WT. % - Percent Weight.

Note: Trace impurities and additional material names not listed above may appear in Section 15 of this SDS. These materials may be listed for local "Right-To-Know" compliance and for other reasons. The exact concentrations are a trade secret.

SECTION 04: FIRST AID MEASURES

IF INHALED: Promptly remove to fresh air. Get immediate medical attention if signs of suffocation, irritation or other symptoms develop.

IN CASE OF SKIN CONTACT: Immediately wash skin with plenty of soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation persists.

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SECTION 04: FIRST AID MEASURES

IN CASE OF EYE CONTACT:	Flush eyes immediately with water for at least 15 minutes. Remove contact lenses if present after the first 5 minutes if you can do so easily and continue flushing. Get immediate medical attention.
IF SWALLOWED:	If conscious, immediately rinse mouth with water and give 1 glass of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.
THE MOST IMPORTANT SYMPTOMS AND EFFECTS, WHETHER ACUTE OR DELAYED:	May irritate the skin. May cause irritation and/or burns to the eyes. Harmful if swallowed or inhaled. May cause severe and possibly fatal allergic reactions if inhaled or swallowed by some asthmatics and other 'sulfite-sensitive' individuals. Reacts with acids to form toxic and irritating sulfur dioxide gas. Releases sulfur dioxide if heated above 150°C.
INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED:	Treat symptomatically. Note potential for anaphylactic shock with allergic individuals.

SECTION 05: FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Material is not flammable. Use extinguishing media appropriate for material in surrounding fire.
HAZARDOUS COMBUSTION PRODUCTS:	No Information Available.
SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:	Releases toxic and irritating sulfur dioxide at fire temperatures.
SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTING:	Wear National Institute for Occupational Safety and Health (NIOSH)-approved self-contained breathing apparatus.

SECTION 06: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Provide ventilation to clear sulfur dioxide fumes which may be generated by contact with water. Wear appropriate personal protective equipment.
ENVIRONMENTAL PRECAUTIONS:	Spills and releases may have to be reported to Federal and/or local authorities. See Section 15 regarding reporting requirements.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP:	Promptly sweep up material with minimum dusting and shovel into an empty container with a cover. Rinse spill area with plenty of water.

SECTION 07: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:	See Section 8 for recommended personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe dust. Do not eat or drink in the work area. Use normal personal hygiene and housekeeping. Keep away from water, ice, acids, heat and oxidizing agents. For Food Grade product, see precautions in section 16 regarding on-board use in preserving shrimp and fish.
CONDITIONS FOR SAFE STORAGE:	Store in a cool, dry, well-ventilated area away from water, ice, acids, and oxidizing agents. Releases sulfur dioxide gas slowly at ambient temperatures.

SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT(S)	ACGIH TLV		PEL	OSHA		NIOSH REL
	TWA	STEL		TWA		
Sodium Metabisulfite	5 mg/m ³	0.25 ppm	None	5 ppm		—

Definitions:

ACGIH - American Conference of Governmental Industrial Hygienists.
 NIOSH - National Institute for Occupational Safety and Health.
 OSHA - Occupational Safety and Health Administration.
 PEL - Permissible Exposure Limit.

RELs - Recommended Exposure Limits.
 STEL - Short-term Exposure Limit.
 TLV - Threshold Limit Value.
 TWA - Time Weighted Average.

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SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:	Local exhaust if dusty conditions exist or if there is a release of sulfur dioxide gas. Do not use in unventilated spaces, e.g., the holds of fishing boats, walk-in coolers or confined spaces.
SKIN AND BODY PROTECTION:	For handling dry material, wear rubber gloves and full work clothing, including long-sleeved shirt and trousers. When handling solutions and there is prolonged or repeated contact, wear impervious gloves, clothing and boots.
RESPIRATORY PROTECTION:	Where required, use a NIOSH-approved respirator for dust, mist and/or sulfur dioxide gas, as conditions indicate. Some exposures may require a NIOSH-approved self-contained breathing apparatus or supplied-air respirator. Equipment selection depends on contaminant type and concentration. Select in accordance with 29 CFR (Code of Federal Regulations) 1910.134 and good industrial hygiene practice.
EYE/FACE PROTECTION:	Wear chemical safety goggles.
OTHER/TYPE:	Eyewash and safety shower are recommended.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid. Fine, White Granular Material.
ODOUR:	Pungent Sulfur Dioxide Odor.
ODOUR THRESHOLD:	Not Determined.
PH:	1% Solution - 4.3.
MELTING POINT/FREEZING POINT:	Begins to rapidly decompose above 150°C.
BOILING POINT:	Not Applicable.
FLASH POINT, METHOD:	Not Flammable.
EVAPORATION RATE:	Not Applicable.
FLAMMABILITY (SOLIDS AND GASES):	Not Flammable.
UPPER FLAMMABLE LIMIT (% BY VOL):	Not Applicable.
LOWER FLAMMABLE LIMIT (% BY VOL):	Not Applicable.
VAPOUR PRESSURE:	Not Applicable.
VAPOUR DENSITY (AIR=1):	Not Applicable.
SPECIFIC GRAVITY (WATER=1):	1.48
SOLUBILITY IN WATER (% W/W):	39% at 16°C.
AUTO IGNITION TEMPERATURE:	Not Applicable.
PARTITION COEFFICIENT N-OCTANOL/WATER:	Not Determined.
DECOMPOSITION TEMPERATURE:	Not Determined.
VISCOSITY:	Not Applicable.
% VOLATILES:	Not Applicable.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	Not Normally Reactive.
CHEMICAL STABILITY:	Normally Stable.
POSSIBILITY OF HAZARDOUS REACTIONS:	Reacts with acids to form toxic and irritating sulfur dioxide gas.
CONDITIONS TO AVOID:	Avoid elevated temperatures. Temperatures above 150°C cause the rapid evolution of toxic and corrosive sulfur dioxide gas.
INCOMPATIBLE MATERIALS:	<ul style="list-style-type: none">• Oxidizers: may cause strong exothermic reactions.• Acids, water and ice: releases sulfur dioxide gas which is toxic, corrosive, and potentially deadly. Water and/or ice speeds the production of sulfur dioxide gas.
HAZARDOUS DECOMPOSITION PRODUCTS:	Sulfur dioxide and sodium sulfide residue. Sodium sulfide is flammable, a dangerous fire risk, a strong irritant to skin and tissue, and is incompatible with acids.

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SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENT(S)	LC50	LD50
Sodium Metabisulfite	1131 - 3200 mg/kg (Oral, Rat)	-

ACUTE TOXICITY:

ORAL: May irritate the gastrointestinal tract. May cause severe or deadly allergic reactions in some asthmatics and sulfite sensitive individuals. Very large doses may cause violent colic, diarrhea, depression, and even death.

INHALATION: Inhalation of dust or mist can irritate the respiratory tract. May cause severe or deadly allergic reactions in some asthmatics and sulfite sensitive individuals. Possible signs and symptoms of allergic reactions include bronchoconstriction, sweating, flushing, hives, rapid heart rate, decreased blood pressure, and anaphylaxis. Contact with acids, water and/or ice, releases sulfur dioxide gas which may be harmful or deadly if inhaled.

DERMAL: Repeated or prolonged contact with dust may cause irritation. Contact with solutions will cause skin irritation and possibly burns.

EYES: Dust or mist may irritate or burn the eyes. Solutions will irritate or burn. Permanent eye injury is possible.

CHRONIC EFFECTS:	None Known.
DELAYED (SUBCHRONIC AND CHRONIC) EFFECTS:	Sodium metabisulfite is not mutagenic in microbial systems or in rat bone marrow metaphase assay or dominant lethal test in rats. A 2-year feeding study in rats was negative for carcinogenicity. In a three-generation feeding study in rats, no adverse effects on reproduction was observed.
SERIOUS EYE DAMAGE / EYE IRRITATION:	Causes serious eye damage.
SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE:	No Data Available.
STOT - REPEAT EXPOSURE:	No Data Available.
MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:	No Data Available.
ASPIRATION HAZARD:	No Data Available.
POTENTIAL HEALTH EFFECTS:	No Data Available.
SIGNS AND SYMPTOMS OF EXPOSURE:	No Data Available.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:	The following ecotoxicity data is available for Sodium metabisulfite:	
	<i>Daphnia magna</i> (Water flea) EC50 48h	89 mg/L
	Fish LC50 96h	32 mg/L
	Algae EC50 72h	48 mg/L
PERSISTENCE AND DEGRADABILITY:	Chemical Oxygen Demand (COD) 168 mg/g.	
BIOACCUMULATIVE POTENTIAL:	No Data Available.	
MOBILITY IN SOIL:	No Data Available.	
OTHER ADVERSE EFFECTS:	No Data Available.	

SECTION 13: DISPOSAL CONSIDERATIONS

Is the unused product a *Resource Conservation and Recovery Act* (RCRA) hazardous waste if discarded? No
 If yes, the RCRA ID number is: Not applicable

DISPOSAL METHODS:	Dispose of in accordance with applicable Federal, Provincial, and Local regulations.
PACKAGING:	No Data Available.

The information provided in Section 13 is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

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SECTION 14: TRANSPORT INFORMATION

Transportation of Dangerous Goods (TDG):	Not Regulated.
United States (US) Department of Transportation (DOT):	Not Regulated.
UNITED NATIONS (UN) NUMBER:	Not Applicable.
TRANSPORT HAZARD CLASS:	Not Regulated.
PACKING GROUP:	Not Applicable.
PROPER SHIPPING NAME:	Not Applicable.
SPECIAL SHIPPING INSTRUCTIONS:	Not Applicable.

SECTION 15: REGULATORY INFORMATION

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) CLASSIFICATION:	D2B.
CANADIAN DOMESTIC SUBSTANCES LIST (DSL):	Listed.
HAZARDOUS PRODUCT REGULATIONS (HPR) COMPLIANCE:	No Data Available.
UNITED STATES (US) FEDERAL REGULATIONS:	
<i>TOXIC SUBSTANCES CONTROL ACT (TSCA):</i>	TSCA INVENTORY STATUS: All components are listed on TSCA Inventory of Chemical Substances. OTHER TSCA ISSUES: None.
<i>Superfund Amendments and Reauthorization Act (SARA):</i>	SARA 311 HAZARD CLASS: Acute Health SARA 313 TOXIC CHEMICALS: No ingredients listed in this section.
US STATE OR LOCAL REGULATIONS:	
State Right-to-Know: California Proposition 65:	This product does not contain any ingredients known to the State of California to cause cancer and/or reproductive harm.

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:	<ul style="list-style-type: none">• Only National Formulary (NF) grade is for use in drug formulation. Only Food Grade material is for use as a food additive.• On-board ship use of Food Grade material to preserve shrimp and fish:• NEVER apply dry material to shrimp or fish. ALWAYS prepare and use a solution in a well-ventilated area.• NEVER use below deck or in any confined space such as a hold or cooler. Injury or death may occur.• ALWAYS use on deck with plenty of ventilation. Follow mixing and use directions• printed on bag.
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.