



MURSATT CHEMICALS LIMITED
11 REGALCREST COURT
WOODBIDGE; ONTARIO, CANADA; L4L 8P3
(905)-850-8444

PRODUCT: PUCKS

CODE: MUR0023

Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER/SUPPLIER..... MURSATT CHEMICALS LIMITED
11 REGALCREST COURT
WOODBIDGE, ONTARIO
CANADA
L4L 8P3
PREPARED BY..... REGULATORY AFFAIRS
PREPARATION DATE..... May25/11
PRODUCT NAME..... PUCKS
PRODUCT CODE..... MUR0023
CHEMICAL FORMULA..... C3CL3N3O3.
MOLECULAR WEIGHT..... 232.41.
CHEMICAL FAMILY..... CHLOROISOCYANURATE.
MATERIAL USE..... N.AV.
EMERGENCY PHONE NO..... CANUTEC (613)-996-6666.

Section 02: HAZARDS IDENTIFICATION

ROUTE OF ENTRY:
SKIN CONTACT..... SKIN CONTACT WITH TCCA CAN CAUSE SEVERE IRRITATION AND / OR BURNS, CHARACTERIZED BY REDNESS, SWELLING AND SCAR FORMATION.
SKIN ABSORPTION..... N.AV.
EYE CONTACT..... EYE CONTACT WITH TCCA CAN CAUSE SEVERE IRRITATION AND / OR BURNS, CHARACTERIZED BY REDNESS, SWELLING AND SCAR FORMATION. MAY CAUSE IMPAIRMENT OF VISION AND CORNEAL DAMAGE.
INHALATION..... INHALATION OF TCCA IS IRRITATING TO THE NOSE, MOUTH, THROAT, AND LUNG.
INGESTION..... INGESTION OF TCCA CAN CAUSE IRRITATION AND/OR BURNS TO THE GASTROINTESTINAL TRACT.
EFFECTS OF ACUTE EXPOSURE..... HARMFUL IF INHALED, INGESTED OR EXPOSED TO SKIN OR EYES.
EFFECTS OF CHRONIC EXPOSURE..... THERE ARE NOT ANY KNOWN OR REPORTED EFFECTS FROM REPEATED EXPOSURE.

Section 03: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	%	Exposure Limit	C.A.S.#	LD/50, Route,Species	LC/50 Route,Species
TRICHLOROISOCYANURIC ACID	60-100	SEE SECTION 11	87-90-1	SEE SECTION 11	SEE SECTION 11

Section 04: FIRST AID MEASURES

EYE CONTACT..... IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES. IF IRRITATION REMAINS AFTER FLUSHING, CALL A PHYSICIAN AT ONCE.
SKIN CONTACT..... PROMPTLY WASH THOROUGHLY WITH WATER FOR AT LEAST 15 MINUTES. IF CLOTHING IS CONTAMINATED WITH TCCA, REMOVE THE CLOTHING IMMEDIATELY AND WASH IT BEFORE REUSE.
INGESTION..... IMMEDIATELY DRINK LARGE AMOUNT OF WATER. DO NOT INDUCE VOMITING. IMMEDIATE MEDICAL ATTENTION IS REQUIRED.
INHALATION..... REMOVE TO FRESH AIR. CALL A PHYSICIAN.
NOTES TO PHYSICIAN..... N.AV.

Section 05: FIRE FIGHTING MEASURES

T.D.G. FLAM. CLASS..... NON FLAMMABLE.
FLAMMABILITY..... NON FLAMMABLE.
IF YES, UNDER WHICH CONDITIONS?..... TCCA IS NOT FLAMMABLE ITSELF, HOWEVER, A THERMAL DECOMPOSITION WILL OCCUR AT ABOVE 225 C.
EXTINGUISHING MEDIA..... A THERMAL DECOMPOSITION CAN BE EXTINGUISHED BY FLOODING WITH COPIOUS AMOUNT OF WATER OR BY ISOLATING THE DECOMPOSING MATERIAL IN OPEN AIR AND ALLOW IT TO BE CONSUMED. TCCA MAY GENERATE NITROGEN TRICHLORIDE WHEN IT IS LEFT UNDER DAMP CONDITION. DO NOT USE DRY FIRE EXTINGUISHERS CONTAINING AMMONIUM COMPOUNDS.
SPECIAL PROCEDURES..... TCCA DECOMPOSES INTO HAZARDOUS GASES IN A FIRE. USE SELF-CONTAINED BREATHING APPARATUS AND GOGGLES. DO NOT APPROACH FROM LEEWARD.
FLASH POINT (C), METHOD..... N.AP.
AUTO IGNITION TEMPERATURE..... N.AV.
UPPER FLAMMABLE LIMIT (% BY VOL.)... N.AP.
LOWER FLAMMABLE LIMIT (% BY VOL.)... N.AP.
EXPLOSION DATA..... N.AV.

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Section 05: FIRE FIGHTING MEASURES

EXPLOSIVE POWER..... N.AV.
 RATE OF BURNING..... N.AV.
 SENSITIVITY TO STATIC DISCHARGE..... N.AV.
 SENSITIVITY TO IMPACT..... N.AV.
 HAZARDOUS COMBUSTION PRODUCTS.. SEE ABOVE.

Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL..... REFER TO SECTION 8 FOR PERSONAL PROTECTION WHEN HANDLING THE SPILLAGE OF TCCA. ANY SPILLAGE OF TCCA SHOULD BE CLEANED UP AS SOON AS POSSIBLE TO PREVENT CONTAMINATION WITH FOREIGN MATERIALS WITH WHICH IT MAY REACT. SEE SECTION 10 - STABILITY AND REACTIVITY. SWEEPINGS OR WASTE MATERIAL SHOULD NOT BE PUT INTO BINS. DAMP OR CONTAMINATED MATERIAL SHOULD NOT BE REPACKED IN CONTAINERS. SEE SECTION 13 FOR DISPOSAL OF SPILLAGE. DO NOT RELEASE UNNEUTRALIZED TCCA TO SEWERS, WATERSHEDS, AND WATER SYSTEMS.

Section 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND EQUIPMENT DO NOT GET INTO EYES, ON SKIN, AND ON CLOTHING. DO NOT BREATHE DUST OR FUMES. MAY BE FATAL IF SWALLOWED. USE PROTECTIVE EQUIPMENT RECOMMENDED IN SECTION 8.
 STORAGE NEEDS..... STORE IN A COOL, DRY AND WELL-VENTILATED AREA. DO NOT ALLOW WATER TO GET INTO CONTAINER. CLOSE CONTAINER TIGHTLY AFTER EACH USE. KEEP AWAY FROM FIRE, HEAT, FLAME, AND DIRECT SUN LIGHT. KEEP AWAY FROM INCOMPATIBLE MATERIALS LISTED IN SECTION 10. KEEP OUT OF REACH OF CHILDREN AND DOMESTIC ANIMALS.

Section 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

GLOVES/ TYPE..... WEAR PROTECTIVE GLOVES TO PREVENT SKIN CONTACT. CONSULT GLOVE MANUFACTURER TO DETERMINE APPROPRIATE TYPE OF GLOVE FOR HANDLING TCCA.
 RESPIRATORY/TYPE..... AVOID BREATHING DUST OR VAPOR. WEAR AN OFFICIALLY APPROVED RESPIRATOR EQUIPPED WITH CHEMICAL CARTRIDGE FOR PROTECTION AGAINST CHLORINE GAS AND DUST.
 EYE/TYPE..... WEAR CHEMICAL SPLASH GOGGLES. WASH EYES WITH CLEAN WATER WHEN THERE IS POTENTIAL EYE CONTACT.
 FOOTWEAR/TYPE..... WEAR APPROPRIATE PROTECTIVE FOOTWEAR.
 CLOTHING/TYPE..... WEAR PROTECTIVE CLOTHING TO PREVENT SKIN CONTACT.
 OTHER/TYPE..... EYE WASH FOUNTAIN AND SAFETY SHOWER SHOULD BE LOCATED IN IMMEDIATE WORK AREA.
 ENGINEERING CONTROLS..... LOCAL EXHAUST VENTILATION.

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... WHITE CRYSTALLINE SOLID.
 ODOUR..... CHLORINE SMELL.
 ODOUR THRESHOLD..... N.AV.
 VAPOUR PRESSURE (MMHG)..... N.AV.
 VAPOUR DENSITY (AIR=1)..... N.AV.
 BY VOLUME..... N.AV.
 BY WEIGHT..... N.AV.
 EVAPORATION RATE..... N.AP.
 BOILING POINT..... N.AP.
 PH..... (1% AQUEOUS SOLUTION, 25 C) : 2.7-3.3.
 SPECIFIC GRAVITY (WATER=1)..... RELATIVE DENSITY CA. = 95G / 100 CC.
 SOLUBILITY IN WATER (% W/W)..... 1.0 G / 100 G AT 25 C.
 COEFFICIENT OF WATER/OIL DIST..... N.AV.

Section 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:
 YES..... STABLE.
 NO, WHICH CONDITIONS?..... TCCA MAY BE UNSTABLE UNDER THESE CONDITIONS: TCCA DECOMPOSES AT TEMPERATURE ABOVE 225 FORMING HAZARDOUS GASES. DAMP OR SLIGHTLY WET CONDITION SHOULD BE AVOIDED. CONTACT WITH SMALL QUANTITY OF WATER MAY RESULT AN EXPLOSIVE REACTION WITH THE GENERATION TRICHLORIDE.
 CONDITIONS TO AVOID..... CONTACT WITH ICOMPATIBLES.
 COMPATABILITY WITH OTHER SUBSTANCES:

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Section 10: STABILITY AND REACTIVITY

YES
NO, WHICH ONES?..... ORGANIC MATERIALS, OILS, GREASE, SAWDUST, REDUCING AGENTS, NITROGEN CONTAINING COMPOUNDS, SODIUM HYPOCHLORITE, CALCIUM HYPOCHLORITE AND OTHER OXIDIZERS, ACID AND ALKALIS.

REACTIVITY CONDITIONS:..... CONTACT WITH INCOMPATIBLES.

HAZARDOUS PRODUCTS OF DECOMPOSITION..... SEE HAZARDOUS COMBUSTION PRODUCTS.

HAZARDOUS POLYMERIZATION..... WILL NOT OCCUR.

Section 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL..... N.AV.

LC 50 OF MATERIAL, SPECIES & ROUTE.. N.AV.

LD 50 OF MATERIAL, SPECIES & ROUTE.. ORAL (MOUSE): 1050 MG/KG.

CARCINOGENICITY OF MATERIAL..... THIS CHEMICAL IS NOT CONSIDERED TO BE CARCINOGENIC BY ANY REFERENCE SOURCE.

REPRODUCTIVE EFFECTS..... N.AV.

IRRITANCY OF MATERIAL..... SEE SECTION 2.

SENSITIZING CAPABILITY OF MATERIAL. N.AV.

SYNERGISTIC MATERIALS..... N.AV.

MUTAGENICITY..... N.AV.

TERATOGENICITY..... N.AV.

Section 12: ECOLOGICAL CONSIDERATIONS

ECOLOGICAL INFORMATION..... TCCA IS HIGHLY TOXIC TO FISH. DO NOT DISCHARGE INTO LAKES, PONDS, STREAM, OR PUBLIC WATERS UNLESS IN ACCORDANCE WITH THE PERMIT OF OFFICIAL REGULATIONS. ON CONTACT WITH MOISTURE, TCCA READILY DECOMPOSE TO CHLORINE, HYPOCHLOROUS ACID AND CYANURIC ACID. CHLORINE AND HYPOCHLOROUS ACID ARE KNOWN TO BE TOXIC TO WILDLIVES, ESPECIALLY TO FISH.

Section 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL..... DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. IF MATERIAL IS DRY, INCINERATION IS RECOMMENDED. IN CASE DISPOSAL IS DONE AFTER MELTING THE MATERIAL BY COPIOUS AMOUNT OF WATER AND NEUTRALIZING TO A NON-OXIDIZING RESIDUE, OBSERVE GOVERNMENT AND LOCAL REGULATIONS. UNNEUTRALIZED MATERIAL SHOULD NOT BE DISPOSED.

Section 14: TRANSPORT INFORMATION

TDG CLASSIFICATION..... 5.1.

PROPER SHIPPING NAME..... TRICHLOROISOCYANURIC ACID, DRY.

UN NUMBER..... 2468.

PACKING GROUP..... II.

SPECIAL SHIPPING INSTRUCTIONS..... N.AV.

Section 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION..... REGISTERED PEST CONTROL PRODUCT. EXEMPT FROM WHMIS CLASSIFICATION.

CPR COMPLIANCE..... THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

Section 16: OTHER INFORMATION

N.AP.=NOT APPLICABLE

N.AV.=NOT AVAILABLE

OTHER INFORMATION..... THE DATA IN THIS MSDS RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND DOES NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS. THIS DATA IS OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS PRODUCT SPECIFICATIONS. NO WARRANTY, EITHER EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.