



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

PRODUCT: VINYL PLUS

CODE: MUR0017

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..... May28/11
PRODUCT NAME..... VINYL PLUS
PRODUCT CODE..... MUR0017
CHEMICAL FORMULA..... MIXTURE.
MOLECULAR WEIGHT..... MIXTURE.
CHEMICAL FAMILY..... MIXTURE.
MATERIAL USE..... N.AV.
EMERGENCY PHONE NO..... CANUTEC (613)-996-6666.

Section 02: HAZARDS IDENTIFICATION

ROUTE OF ENTRY:
SKIN CONTACT..... CORROSIVE. CAUSES BURNS.
SKIN ABSORPTION..... N.AV.
EYE CONTACT..... CORROSIVE. CAUSES EYE BURNS.
INHALATION..... CORROSIVE TO THE RESPIRATORY PASSAGE.
INGESTION..... CORROSIVE. CAUSES BURNS TO THE MOUTH, THROAT AND STOMACH.
EFFECTS OF ACUTE EXPOSURE..... SEE ABOVE.
EFFECTS OF CHRONIC EXPOSURE..... SEE SECTION 11.

Section 03: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	%	Exposure Limit	C.A.S.#	LD/50, Route,Species	LC/50 Route,Species
DISODIUM METASILICATE	5-10	SEE SECTION 11	6834-92-0	SEE SECTION 11	SEE SECTION 11
DIETHYLENE GLYCOL MONBUTYL ETHER	3-7	SEE SECTION 11	112-34-5	SEE SECTION 11	SEE SECTION 11
NONYLPHENOL ETHOXYLATE	1-5	SEE SECTION 11	9016-45-9	SEE SECTION 11	SEE SECTION 11
TETRASODIUM ETHYLENEDIAMINE TETRAACETATE TETRAHYDRATE	0.1-1.0	SEE SECTION 11	13235-36-4	SEE SECTION 11	SEE SECTION 11

Section 04: FIRST AID MEASURES

EYE CONTACT..... IN CASE OF CONTACT, OR SUSPECTED CONTACT, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION IMMEDIATELY AFTER FLUSHING.
SKIN CONTACT..... IN CASE OF CONTACT, IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. REMOVE CONTAMINATED CLOTHING AND LAUNDER BEFORE REUSE.
INHALATION..... REMOVE PERSON TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GET IMMEDIATE MEDICAL ATTENTION.
INGESTION..... DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. SEEK IMMEDIATE MEDICAL ATTENTION. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS.
NOTES TO PHYSICIAN..... TREATMENT BASED ON JUDGMENT OF THE PHYSICIAN IN RESPONSE TO REACTIONS OF THE PATIENT.

Section 05: FIRE FIGHTING MEASURES

T.D.G. FLAM. CLASS..... NON FLAMMABLE.
FLAMMABILITY..... NON FLAMMABLE.
IF YES, UNDER WHICH CONDITIONS?
EXTINGUISHING MEDIA..... USE WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE, OR ALCOHOL FOAM.
SPECIAL PROCEDURES..... FIRE FIGHTERS SHOULD WEAR FULL PROTECTIVE CLOTHING, INCLUDING SELF-CONTAINED BREATHING EQUIPMENT.
FLASH POINT (C), METHOD..... N.AV.
AUTO IGNITION TEMPERATURE..... N.AV.
UPPER FLAMMABLE LIMIT (% BY VOL.).... N.AV.

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Section 05: FIRE FIGHTING MEASURES

LOWER FLAMMABLE LIMIT (% BY VOL.)... N.AV.
 EXPLOSION DATA..... N.AP.
 EXPLOSIVE POWER..... N.AP.
 RATE OF BURNING..... N.AV.
 SENSITIVITY TO STATIC DISCHARGE..... N.AV.
 SENSITIVITY TO IMPACT..... N.AV.
 HAZARDOUS COMBUSTION PRODUCTS.. CARBON DIOXIDE, CARBON MONOXIDE. TOXIC FUMES.

Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL..... CONTAIN SPILL. WEAR ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. ABSORB WITH SUITABLE INERT MATERIAL. FLUSH RESIDUE WITH WATER. PREVENT SPILLED MATERIAL FROM ENTERING SEWERS, CONFINED SPACES, DRAINS, OR WATERWAYS. COLLECT INTO A SUITABLE CONTAINER FOR DISPOSAL.

Section 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND AVOID CONTACT WITH EYES, SKIN AND CLOTHING. AVOID BREATHING IN DUST. EQUIPMENT KEEP THE CONTAINERS CLOSED WHEN NOT IN USE. WASH THOROUGHLY AFTER HANDLING. .
 STORAGE NEEDS..... KEEP CONTAINERS TIGHTLY CLOSED. STORE IN CLEAN, TIGHTLY CLOSED STEEL CONTAINERS. PLACE AWAY FROM INCOMPATIBLE MATERIAL. DO NOT STORE IN ALUMINUM, FIBERGLASS, COPPER, BRASS, ZINC OR GALVANIZED CONTAINERS. STORE IN COOL, DRY AND WELL VENTILATED LOCATION.

Section 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

GLOVES/ TYPE..... APPROPRIATE CHEMICAL RESISTANT GLOVES SHOULD BE WORN.
 RESPIRATORY/TYPE..... IF MIST OR VAPOUR FORMATION SHOULD OCCUR, USE A NIOSH APPROVED RESPIRATOR.
 EYE/TYPE..... CHEMICAL GOGGLES AND/OR FACE SHIELDS SHOULD BE WORN WHERE SPLASHING IS A POSSIBILITY.
 FOOTWEAR/TYPE..... IMPERMEABLE BOOTS.
 CLOTHING/TYPE..... APRON, COVERALLS AND/OR OTHER RESISTANT PROTECTIVE CLOTHING. IMPERVIOUS CLOTHING.
 OTHER/TYPE..... EYEWASH STATION AND SAFETY SHOWER IN WORK AREA.
 ENGINEERING CONTROLS..... GENERAL VENTILATION. LOCAL EXHAUST VENTILATION AS NECESSARY TO MAINTAIN EXPOSURES TO WITHIN APPLICABLE LIMITS.

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... LIQUID. LIGHT BLUE.
 ODOUR..... SLIGHT SWEET.
 ODOUR THRESHOLD..... N.AV.
 VAPOUR PRESSURE (MMHG)..... N.AV.
 VAPOUR DENSITY (AIR=1)
 BY VOLUME..... N.AV.
 BY WEIGHT..... N.AV.
 EVAPORATION RATE..... N.AV.
 BOILING POINT..... N.AV.
 PH..... 12.2.
 SPECIFIC GRAVITY (WATER=1)..... 1.03.
 SOLUBILITY IN WATER (% W/W)..... SOLUBLE.
 COEFFICIENT OF WATER/OIL DIST..... N.AV.

Section 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:..... STABLE.
 CONDITIONS TO AVOID..... CONTACT WITH ICOMPATIBLES.
 MATERIALS TO AVOID..... CONTACT WITH ACIDS. GENERATES HEAT WHEN MIXED WITH ACID. MAY REACT WITH AMMONIUM SALT SOLUTIONS RESULTING IN EVOLUTION OF AMMONIA GAS. FLAMMABLE HYDROGEN GAS MAY BE PRODUCED ON CONTACT WITH ALUMINUM, TIN, LEAD, AND ZINC. CARBON MONOXIDE GAS MAY BE PRODUCED ON CONTACT WITH REDUCING SUGARS. STRONG OXIDIZING AGENTS. STRONG ALKALIES.
 HAZARDOUS PRODUCTS OF CARBON OXIDE, CARBON DIOXIDE. HYDROGEN GAS. AMMONIA. OXIDES OF DECOMPOSITION NITROGEN.
 HAZARDOUS POLYMERIZATION..... WILL NOT OCCUR.

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Section 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL..... N.AV.
 LC 50 OF MATERIAL, SPECIES & ROUTE.. N.AV.
 LD 50 OF MATERIAL, SPECIES & ROUTE.. DISODIUM METASILICATE - RTEC ORAL LD50 RAT: 1153 MG/KG; ORAL LD50 MOUSE: 770 MG/KG. GLYCOL ETHER DB - DERMAL LD50 (RABBIT) = 2700 MG/KG; ORAL LD50 (RAT) = 3384 MG/KG. TETRASODIUM ETHYLENE DIAMINE TETRAACETATE: ORAL LD50 (RAT) = 10 G/KG. NONYLPHENOL ETHOXYLATE - ORAL LD50 RAT: 1310 MG/KG; ORAL LD50 MOUSE : >50 GM/KG; DERMAL LD50 RABBIT: 2 ML/KG.

CARCINOGENICITY OF MATERIAL..... THIS MIXTURE CONTAINS A VERY SMALL AMOUNT OF THE TRISODIUM SALT OF NITRILOTRIACETIC ACID (TRISODIUM NTS, CAS:005064-31-3) WHICH IS LISTED AS A POTENTIAL CARCINOGEN. COMPONENTS LISTED BY IARC AND NTP: TRISODIUM NITRILOTRIACETATE. ALTHOUGH LARGE DIETARY OF NTA HAVE CAUSED URINARY TUMORS IN LABORATORY ANIMALS, THERE IS LITTLE LIKELIHOOD THAT NTA COULD CAUSE CANCER IN HUMANS, ESPECIALLY AT SUBTOXIC DOSES. THE TRISODIUM SALT OF EDTA DID NOT CAUSE CANCER IN LABORATORY ANIMALS.

REPRODUCTIVE EFFECTS..... CONTAINS <1% TETRASODIUM ETHYLENEDIAMINE TETRAACETATE TETRAHYDRATE. EDTA AND ITS SODIUM SALTS HAVE BEEN REPORTED TO CAUSE BIRTH DEFECTS IN LABORATORY ANIMALS ONLY AT EXAGGERATED DOSES THAT WERE TOXIC TO THE MOTHER. THESE EFFECTS ARE LIKELY ASSOCIATED WITH ZINC DEFINIENCY DUE TO CHELATION. EXPOSURES HAVING NO EFFECT ON THE MOTHER SHOULD HAVE NO EFFECT ON THE FETUS.

IRRITANCY OF MATERIAL..... SEE SECTION 2.
 SENSITIZING CAPABILITY OF MATERIAL. N.AV.
 SYNERGISTIC MATERIALS..... N.AV.
 MUTAGENICITY..... SODIUM SILICATE WAS NOT MUTAGENIC TO BACTERIUM E. COLI WHEN TESTED IN A MUTAGENICITY BIOASSAY.

TERATOGENICITY..... N.AV.
 ADDITIONAL INFORMATION..... SODIUM SILICATE HAS NOT BEEN TESTED FOR PRIMARY EYE IRRITATION POTENTIAL. HOWEVER, ON THE BASIS OF ITS HIGH DEGREE OF ALKALINITY, IT IS REGARDED AS CORROSIVE TO THE EYES. WHEN THIS MATERIAL WAS TESTED FOR SKIN CORROSION / IRRITATION POTENTIAL ACCORDING TO OECD GUIDELINES SECTION 404, IT PRODUCED DERMAL CORROSION. THE ACUTE ORAL TOXICITY OF THIS PRODUCT HAS NOT BEEN TESTED. WHEN SODIUM SILICATES WERE TESTED ON A 100% SOLIDS BASIS, THEIR SINGLE DOSE ACUTE ORAL LD50 IN RATS RANGED FROM 1500 MG/KG TO 3200 MG/KG. THE ACUTE ORAL LETHALITY RESULTED FROM NONSPECIFIC CAUSES. SUBCHRONIC DATA: IN A STUDY OF RATS FED SODIUM SILICATE IN DRINKING WATER FOR THREE MONTHS, AT 200, 600 AND 1800 PPM, CHANGES WERE REPORTED IN THE BLOOD CHEMISTRY OF SOME ANIMALS, BUT NO SPECIFIC CHANGES TO THE ORGANS OF THE ANIMALS DUE TO SODIUM SILICATE ADMINISTRATION WERE OBSERVED IN ANY OF THE DOSAGE GROUPS. ANOTHER STUDY REPORTED ADVERSE EFFECTS TO THE KIDNEYS OF DOGS FED SODIUM SILICATE IN THEIR DIET AT 2.4G/KG/DAY FOR 4 WEEKS, WHEREAS RATS FED THE SAME DOSAGE DID NOT DEVELOP ANY TREATMENT-RELATED EFFECTS. DECREASED NUMBERS OF BIRTHS AND SURVIVAL TO WEANING WAS REPORTED FOR RATS FED SODIUM SILICATE IN THEIR DRINKING WATER AT 600 AND 1200 PPM.

Section 12: ECOLOGICAL CONSIDERATIONS

ECOLOGICAL INFORMATION..... N.AV.

Section 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL..... DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

Section 14: TRANSPORT INFORMATION

TDG CLASSIFICATION..... 8.
 PROPER SHIPPING NAME..... CORROSIVE LIQUIDS, N.O.S. (DISODIUM TRIOXOSILICATE).
 UN NUMBER..... 1760.
 PACKING GROUP..... III.
 SPECIAL SHIPPING INSTRUCTIONS..... NO SPECIAL SHIPPING REQUIREMENTS.

Section 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION..... D2A, D2B, E.
 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.

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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.