



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

PRODUCT: TILE-X

CODE: MUR0016

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..... May27/11
PRODUCT NAME..... TILE-X
PRODUCT CODE..... MUR0016
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..... SKIN CONTACT MAY CAUSE IRRITATION OR BURNS.
SKIN ABSORPTION..... N.AV.
EYE CONTACT..... MAY CAUSE BURNS, IRRITATION, PERMANENT DAMAGE TO THE CORNEA.
INHALATION..... MAY CAUSE UPPER RESPIRATORY TRACT IRRITATION, COUGHING, SHORTNESS OF BREATH AND CHEST PAIN.
INGESTION..... MAY CAUSE IRRITATION AND/OR BURNS OF 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
SODIUM HYPOCHLORITE PHOSPHATE	15-40	SEE SECTION 11	11084-85-8	SEE SECTION 11	SEE SECTION 11
SODIUM DODECYLBENZENE SULPHONATE	1-5	SEE SECTION 11	25155-30-0	SEE SECTION 11	SEE SECTION 11
CRISTOBALITE	0.1-1	SEE SECTION 11	14464-46-1	SEE SECTION 11	SEE SECTION 11

Section 04: FIRST AID MEASURES

EYE CONTACT..... WASH EYES WITH WATER FOR A MINIMUM OF 30 MINUTES OR UNTIL NO EVIDENCE OF THE CHEMICAL REMAINS. HOLD EYELIDS OPEN DURING FLUSHING. OBTAIN MEDICAL ATTENTION WITHOUT DELAY, PREFERABLY FROM AN OPHTHALMOLOGIST. CONTINUE FLUSHING FOR AN ADDITIONAL 15 MINUTES IF A PHYSICIAN IS NOT IMMEDIATELY AVAILABLE. 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. .

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..... IF SYMPTOMS ARE EXPERIENCED, REMOVE SOURCE OF CONTAMINATION OR MOVE VICTIM TO FRESH AIR. IF SYMPTOMS PERSIST, GET MEDICAL ATTENTION. IF THE AFFECTED PERSON IS NOT BREATHING, APPLY ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IN SITUATIONS WHERE ADMINISTERING OXYGEN IS APPROPRIATE, FIRST AIDERS MUST BE TRAINED IN THE SAFE USE AND HANDLING OF OXYGEN. IT IS PREFERABLE TO ADMINISTER OXYGEN UNDER A DOCTOR'S SUPERVISION OR ADVICE. IF THE HEART HAS STOPPED, TRAINED PERSONNEL SHOULD BEGIN CARDIOPULMONARY RESUSCITATION (CPR) IMMEDIATELY. IMMEDIATE MEDICAL ASSISTANCE IS REQUIRED. .

INGESTION..... SEEK IMMEDIATE MEDICAL ATTENTION. DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS. ADMINISTER ARTIFICIAL RESPIRATION IF BREATHING HAS STOPPED. IF THE HEART HAS STOPPED, TRAINED PERSONNEL SHOULD BEGIN CARDIOPULMONARY RESUSCITATION (CPR) IMMEDIATELY. .

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Section 04: FIRST AID MEASURES

NOTES TO PHYSICIAN..... NO SPECIFIC ANTIDOTE. TREAT SYMPTOMATICALLY. ALL TREATMENTS SHOULD BE BASED ON OBSERVED SIGNS AND SYMPTOMS OF DISTRESS IN THE PATIENT. INGESTION OF LARGE QUANTITIES OF PHOSPHATE SALTS (> 1.0 GRAM FOR AN ADULT) MAY CAUSE AN OSMOTIC CATHARSIS RESULTING IN DIARRHEA AND PROBABLE ABDOMINAL CRAMPS. LARGER DOSES SUCH AS 4-8 GRAMS WILL ALMOST CERTAINLY CAUSE THESE EFFECTS IN EVERYONE. IN HEALTHY INDIVIDUALS MOST OF THE INGESTED SALT WILL BE EXCRETED IN THE FECES WITH THE DIARRHEA AND, THUS NOT CAUSE ANY SYSTEMIC TOXICITY. DOSES GREATER THAN 10 GRAMS HYPOTHETICALLY MAY CAUSE SYSTEMIC TOXICITY. TREATMENT SHOULD TAKE INTO CONSIDERATION BOTH ANIONIC AND CATION PORTION OF THE MOLECULE. THE FOLLOWING TREATMENTS SHOULD BE CONSIDERED FOR THE SPECIFIC GROUP(S) OF PHOSPHATE SALTS FOUND IN THE PRODUCT: - ALL PHOSPHATE SALTS, EXCEPT CALCIUM SALTS, HAVE A HYPOTHETICAL RISK OF HYPOCALCEMIA, SO CALCIUM LEVELS SHOULD BE MONITORED. - AMMONIUM SALTS HAVE A HYPOTHETICAL RISK OF AMMONIA TOXICITY. IN ADDITION TO CALCIUM LEVELS, AMMONIA AND PHOSPHATE LEVELS SHOULD BE MONITORED. - POTASSIUM SALTS HAVE A HYPOTHETICAL RISK OF HYPERKALEMIA WHICH CAN CAUSE CARDIAC ARRHYTHMIA. IN ADDITION TO CALCIUM LEVELS, POTASSIUM AND PHOSPHATE LEVELS SHOULD BE MONITORED. ALSO CONSIDER CONTINUOUS EKG MONITORING TO DETECT HYPERKALEMIA. - SODIUM SALTS HAVE A HYPOTHETICAL RISK OF HYPERNATREMIA. IN ADDITION TO CALCIUM LEVELS, SODIUM AND PHOSPHATE LEVELS SHOULD BE MONITORED.

Section 05: FIRE FIGHTING MEASURES

T.D.G. FLAM. CLASS..... NON FLAMMABLE.
 FLAMMABILITY..... NON FLAMMABLE.
 IF YES, UNDER WHICH CONDITIONS?
 EXTINGUISHING MEDIA..... WATER SPRAY. WATER FOG, CO2, DRY CHEMICAL. ALCOHOL FOAM.
 SPECIAL PROCEDURES..... FIRE FIGHTERS SHOULD WEAR FULL PROTECTIVE CLOTHING, INCLUDING SELF-CONTAINED BREATHING EQUIPMENT. .
 FLASH POINT (C), METHOD..... N.A.P.
 AUTO IGNITION TEMPERATURE..... N.A.V.
 UPPER FLAMMABLE LIMIT (% BY VOL.)
 LOWER FLAMMABLE LIMIT (% BY VOL.)... N.A.V.
 EXPLOSION DATA..... N.A.V.
 EXPLOSIVE POWER..... N.A.V.
 RATE OF BURNING..... N.A.V.
 SENSITIVITY TO STATIC DISCHARGE
 SENSITIVITY TO IMPACT..... N.A.V.
 HAZARDOUS COMBUSTION PRODUCTS.. OXIDES OF PHOSPHORUS. OXIDES OF SODIUM. OXIDES OF SULFUR. OXIDES OF CARBON. HYDROGEN SULPHIDE. ACRID SMOKE AND IRRITATING FUMES.

Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL..... WEAR APPROPRIATE PROTECTIVE EQUIPMENT. SCOOP UP OR VACUUM UP AND PLACE IN AN APPROPRIATE CLOSED CONTAINER. AVOID RAISING DUST. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE. . PREVENT ENTRY INTO SEWERS OR STREAMS, DIKE IF NEEDED. CONSULT LOCAL AUTHORITIES.

Section 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND FOR INDUSTRIAL USE ONLY. HANDLE AND OPEN CONTAINERS WITH CARE. AVOID EQUIPMENT CONTACT WITH EYES, SKIN AND CLOTHING. DO NOT INGEST. AVOID INHALATION OF CHEMICAL. EMPTY CONTAINERS MAY CONTAIN HAZARDOUS PRODUCT RESIDUES. KEEP THE CONTAINERS CLOSED WHEN NOT IN USE. PROTECT AGAINST PHYSICAL DAMAGE. USE APPROPRIATE PERSONNEL PROTECTIVE EQUIPMENT. .
 STORAGE NEEDS..... STORE IN A DRY, COOL AND WELL VENTILATED AREA.

Section 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

GLOVES/ TYPE..... APPROPRIATE CHEMICAL RESISTANT GLOVES SHOULD BE WORN.
 RESPIRATORY/TYPE..... IF EXPOSURE EXCEEDS OCCUPATIONAL EXPOSURE LIMITS, USE AN APPROPRIATE NIOSH APPROVED RESPIRATOR. IN CASE OF SPILL OR LEAK RESULTING IN UNKNOWN CONCENTRATION, USE NIOSH APPROVED SUPPLIED AIR RESPIRATOR.
 EYE/TYPE..... CHEMICAL GOGGLES; ALSO WEAR A FACE SHIELD IF SPLASHING HAZARD EXISTS.
 FOOTWEAR/TYPE..... PROTECTIVE FOOTWEAR. CONSIDERATION MUST BE GIVEN BOTH TO DURABILITY AS WELL AS PERMEATION RESISTANCE.

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CLOTHING/TYPE..... SUITABLE PROTECTIVE CLOTHING. CONSIDERATION MUST BE GIVEN BOTH TO DURABILITY AS WELL AS PERMEATION RESISTANCE.
 OTHER/TYPE..... EYEWASH STATION AND SAFETY SHOWER IN WORK AREA.
 ENGINEERING CONTROLS..... GENERAL VENTILATION. USE LOCAL VENTILATION AT PRODUCT HANDLING AND TRANSFER POINTS.

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... OFF-WHITE GRANULAR SOLID.
 COLOR.....
 ODOUR..... SLIGHT CHLORINE ODOR.
 ODOUR THRESHOLD..... N.AV.
 VAPOUR PRESSURE (MMHG)..... N.AP.
 VAPOUR DENSITY (AIR=1)
 BY VOLUME..... N.AP.
 BY WEIGHT..... N.AP.
 EVAPORATION RATE..... N.AP.
 BOILING POINT..... N.AP.
 PH..... 9.98 (10% SOLUTION).
 SPECIFIC GRAVITY (WATER=1)..... 0.9.
 SOLUBILITY IN WATER (% W/W)..... N.AV.
 COEFFICIENT OF WATER/OIL DIST..... N.AV.

Section 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:..... STABLE UNDER NORMAL CONDITIONS OF HANDLING, USE AND TRANSPORTATION.
 CONDITIONS TO AVOID..... HEAT.
 NO, WHICH ONES?..... AMMONIA. STRONG ACIDS. STRONG REDUCING AGENTS. ORGANIC MATERIALS. AMINES. STRONG OXIDIZING AGENTS.
 HAZARDOUS PRODUCTS OF CHLORINE. OXIDES OF SULFUR.
 DECOMPOSITION
 HAZARDOUS POLYMERIZATION..... WILL NOT OCCUR.

Section 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL..... CRISTOBALITE: 0.005 MG/M3 (RESPIRABLE), OSHA.
 LC 50 OF MATERIAL, SPECIES & ROUTE.. N.AV.
 LD 50 OF MATERIAL, SPECIES & ROUTE.. SODIUM HYPOCHLORITE PHOSPHATE: 3000 MG/KG (DERMAL, RABBIT); 4020 MG/KG (ORAL, RAT). SODIUM DODECYLBENZENE SULPHONATE: 438 MG/KG (ORAL, RAT); 1330 MG/KG (ORAL, MOUSE).
 CARCINOGENICITY OF MATERIAL..... THIS PRODUCT CONTAINS LESS THAN 0.5% CRYSTALLINE SILICA WHICH HAS BEEN CLASSIFIED AS A GROUP 1 CARCINOGEN BY IARC. RESPIRABLE CRYSTALLINE SILICA IS ALSO LISTED BY NTP AS A KNOWN HUMAN CARCINOGEN.
 REPRODUCTIVE EFFECTS..... N.AV.
 IRRITANCY OF MATERIAL..... INGESTION: MAY CAUSE IRRITATION AND/OR BURNS OF THE MOUTH, THROAT AND STOMACH. SKIN CONTACT: SKIN CONTACT MAY CAUSE IRRITATION OR BURNS. INHALATION: MAY CAUSE UPPER RESPIRATORY TRACT IRRITATION, COUGHING, SHORTNESS OF BREATH AND CHEST PAIN. EYE CONTACT: MAY CAUSE BURNS, IRRITATION, PERMANENT DAMAGE TO THE CORNEA.
 SENSITIZING CAPABILITY OF MATERIAL. N.AV.
 SYNERGISTIC MATERIALS..... N.AV.
 MUTAGENICITY..... N.AV.
 TERATOGENICITY..... N.AV.

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..... NOT REGULATED.
 PROPER SHIPPING NAME..... N.AP.
 UN NUMBER..... N.AP.
 PACKING GROUP..... N.AP.
 SPECIAL SHIPPING INSTRUCTIONS..... NOT REGULATED.

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Section 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION..... E. D2A.
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.
IARC..... INTERNATIONAL AGENCY FOR RESEARCH ON CANCER.
NTP..... NATIONAL TOXICOLOGY PROGRAM.