



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

PRODUCT: MOR-CAL

CODE: MUR0035

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..... Jun01/08
PRODUCT NAME..... MOR-CAL
PRODUCT CODE..... MUR0035
CHEMICAL FORMULA..... CA₂CL₂H₂O.
MOLECULAR WEIGHT..... N.AV.
CHEMICAL FAMILY..... N.AV.
MATERIAL USE..... SPA WATER TREATMENT.
EMERGENCY PHONE NO..... CANUTEC (613)-996-6666.

Section 02: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	%	Exposure Limit	C.A.S.#	LD/50, Route, Species	LC/50 Route, Species
CALCIUM CHLORIDE	77-80	N.AV.	10043-52-4	SKIN ABSORPTION: >5000 MG/KG (RABBIT). ORAL: 900-2100 MG/KG (RAT).	N.AV.
POTASSIUM CHLORIDE	1-5	N.AV.	7447-40-7	N.AV.	N.AV.
SODIUM CHLORIDE	1-5	N.AV.	7647-14-5	N.AV.	N.AV.

Section 03: HAZARDS IDENTIFICATION

ROUTE OF ENTRY:
SKIN CONTACT..... PROLONGED EXPOSURE MAY CAUSE SKIN IRRITATION.
SKIN ABSORPTION..... SEE SECTION 02.
EYE CONTACT..... CAUSES EYE IRRITATION.
INHALATION..... N.AV.
INGESTION..... SWALLOWING LARGER AMOUNT MAY CAUSE INJURY. INGESTION MAY CAUSE
GASTROINTESTINAL IRRITATION OR ULCERATION.
EFFECTS OF ACUTE EXPOSURE..... SEE ABOVE.
EFFECTS OF CHRONIC EXPOSURE..... SEE ABOVE.
INHALATION, CHRONIC..... N.AV.

Section 04: FIRST AID MEASURES

EYE CONTACT..... IRRIGATE WITH FLOWING WATER IMMEDIATELY AND CONTINUOUSLY FOR 15
MINUTES. CONSULT MEDICAL PERSONNEL.
SKIN CONTACT..... WASH OFF IN FLOWING WATER OR SHOWER.
INGESTION..... IF SWALLOWED, GIVE ONE CUP (240 ML) OF WATER OR MILK IF AVAILABLE AND
SEEK MEDICAL ATTENTION. DO NOT INDUCE VOMITING UNLESS DIRECTED TO
DO SO BY MEDICAL PERSONNEL.
INHALATION..... REMOVE TO FRESH AIR IF EFFECTS OCCUR. CONSULT A PHYSICIAN.
NOTES TO PHYSICIAN..... IF BURN IS PRESENT, TREAT AS ANY THERMAL BURN, AFTER DECONTAMINATION.
NO SPECIFIC ANTIDOTE. SUPPORTIVE CARE. 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..... DRY CHEMICAL CARBON DIOXIDE, WATER SPRAY OR REGULAR FOAM. FOR
LARGER FIRES, USE WATER SPRAY, FOG OR REGULAR FOAM.
SPECIAL PROCEDURES..... MOVE CONTAINER FROM FIRE AREA IF YOU CAN DO IT WITHOUT RISK. APPLY
COOLING WATER TO SIDES OF CONTAINER THAT ARE EXPOSED TO FLAMES
UNTIL WELL AFTER FIRE IS OUT. EXTINGUISH FIRE USING AGENT SUITABLE FOR
TYPE OF SURROUNDING FIRE. DO NOT USE WATER DIRECTLY ON MATERIAL.
AVOID BREATHING CORROSIVE VAPORS; KEEP UPWIND.
FLASH POINT (C), METHOD..... N.AP.
AUTO IGNITION TEMPERATURE..... N.AP.
UPPER FLAMMABLE LIMIT (% BY VOL.).... N.AP.

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Section 05: FIRE FIGHTING MEASURES

LOWER FLAMMABLE LIMIT (% BY VOL.)... N.AP.
 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.. THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE TOXIC AND CORROSIVE FUMES.

Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL..... FOR SMALL SPILLS: CONTAIN SPILL IF POSSIBLE. COLLECT MATERIAL IN SUITABLE AND PROPERLY LABELED CONTAINERS. FLUSH RESIDUE WITH PLENTY OF WATER. AVOID CONTACT WITH EYES AND SKIN. MAY BE A SLIPPING HAZARD. CONTAIN SPILL IF POSSIBLE. COLLECT MATERIAL IN SUITABLE AND PROPERLY LABELED CONTAINERS. FLUSH RESIDUE WITH PLENTY OF WATER. AVOID CONTACT WITH EYES AND SKIN. MAY BE A SLIPPING HAZARD.

Section 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES ARE RECOMMENDED.
 EQUIPMENT
 STORAGE NEEDS..... STORE IN A COOL, DRY, WELL-VENTILATED AREA AWAY FROM INCOMPATIBLES.

Section 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

GLOVES/ TYPE..... IMPERVIOUS GLOVES.
 RESPIRATORY/TYPE..... NONE NORMALLY REQUIRED. HOWEVER, IF MIST OR VAPOURS FORMATION SHOULD OCCUR, USE A NIOSH APPROVED RESPIRATOR.
 EYE/TYPE..... USE SAFETY GLASSES WITH SPLASH SHIELDS OR SAFETY GOGGLES TO PREVENT CONTACT WITH THIS SUBSTANCE. .
 FOOTWEAR/TYPE..... WORK BOOTS.
 CLOTHING/TYPE..... IMPERVIOUS CLOTHING.
 OTHER/TYPE..... EYEWASH STATION AND SAFETY SHOWER IN WORK AREA.
 ENGINEERING CONTROLS..... GOOD GENERAL VENTILATION SUFFICIENT FOR MOST CONDITIONS.

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... SOLID FLAKES.
 COLOR..... WHITE TO OFF-WHITE.
 ODOUR..... NONE.
 ODOUR THRESHOLD..... N.AP.
 VAPOUR PRESSURE (MMHG)..... N.AP.
 VAPOUR DENSITY (AIR=1)..... N.AP.
 BY VOLUME
 BY WEIGHT
 EVAPORATION RATE..... N.AP.
 BOILING POINT..... N.AP.
 MELTING POINT (C)..... 174.
 PH..... N.AP.
 SPECIFIC GRAVITY (WATER=1)..... BULK DENSITY: 51-60 LB/FT3 ESTIMATED.
 SOLUBILITY IN WATER (% W/W)..... VERY SOLUBLE.
 COEFFICIENT OF WATER/OIL DIST..... N.AV.

Section 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:
 YES..... STABLE.
 NO, WHICH CONDITIONS?
 CONDITIONS TO AVOID..... CONTACT WITH ICOMPATIBLES.
 COMPATABILITY WITH OTHER
 SUBSTANCES:
 YES
 NO, WHICH ONES?..... FLAMMABLE HYDROGEN MAY BE GENERATED FROM CONTACT WITH METALS SUCH AS ZINC OR SODIUM. AVOID CONTACT WITH SULFURIC ACID.
 REACTIVITY CONDITIONS..... CONTACT WITH INCOMPATIBLES.
 HAZARDOUS PRODUCTS OF THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE TOXIC AND CORROSIVE
 DECOMPOSITION FUMES.
 HAZARDOUS POLYMERIZATION..... NOT KNOWN TO OCCUR.

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Section 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL
 LC 50 OF MATERIAL, SPECIES & ROUTE.. SEE SECTION 02.
 LD 50 OF MATERIAL, SPECIES & ROUTE.. SEE SECTION 02.
 CARCINOGENICITY OF MATERIAL..... N.AV.
 REPRODUCTIVE EFFECTS..... N.AV.
 IRRITANCY OF MATERIAL..... SEE SECTION 03.
 SENSITIZING CAPABILITY OF MATERIAL. N.AV.
 SYNERGISTIC MATERIALS..... N.AV.
 MUTAGENICITY..... N.AV.
 TERATOGENICITY..... N.AV.

Section 12: ECOLOGICAL CONSIDERATIONS

ECOLOGICAL DATA..... MATERIAL IS PRACTICALLY NON-TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS (LC 50 GREATER THAN 100 MG/L IN MOST SENSITIVE SPECIES).
 DEGRADABILITY..... N.AP.
 PARTITIONING..... PARTITIONING FROM WATER TO N-OCTANOL IS NOT APPLICABLE.

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.

Section 15: REGULATORY INFORMATION

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.
 WHMIS CLASSIFICATION..... D2B.

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.