



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

PRODUCT: ALKIL

CODE: MUR0038

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..... ALKIL
PRODUCT CODE..... MUR0038
CHEMICAL FORMULA..... MIXTURE.
MOLECULAR WEIGHT..... MIXTURE.
CHEMICAL FAMILY..... QUATERNARY AMMONIUM COMPOUNDS.
MATERIAL USE..... SWIMMING POOL DISINFECTANT.
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
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (C12-16)	30-60	SEE SECTION 11	68424-85-1	SEE SECTION 11	SEE SECTION 11
ETHANOL	5-10	SEE SECTION 11	64-17-5	SEE SECTION 11	SEE SECTION 11

Section 03: HAZARDS IDENTIFICATION

ROUTE OF ENTRY:
SKIN CONTACT..... THIS PRODUCT MAY BE CORROSIVE TO THE SKIN.
SKIN ABSORPTION..... THIS PRODUCT MAY BE HARMFUL IF IT IS ABSORBED THROUGH THE SKIN.
EYE CONTACT..... THIS PRODUCT MAY BE CORROSIVE TO EYES.
INHALATION..... THIS PRODUCT MAY CAUSE IRRITATION TO THE RESPIRATORY SYSTEM. EXCESSIVE INHALATION OF THIS MATERIAL CAUSES HEADACHE, DIZZINESS, NAUSEA AND LOSS OF MOTOR SKILLS.
INGESTION..... THIS PRODUCT MAY BE HARMFUL OR FATAL IF SWALLOWED.
EFFECTS OF ACUTE EXPOSURE..... DANGER! CORROSIVE; FLAMMABLE. MAY BE CORROSIVE TO THE SKIN AND EYES. HARMFUL OR FATAL IF SWALLOWED.
EFFECTS OF CHRONIC EXPOSURE..... N.A.V.
INHALATION, CHRONIC..... N.A.V.

Section 04: FIRST AID MEASURES

EYE CONTACT..... IMMEDIATELY FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION OR ADVICE.
SKIN CONTACT..... FOR SKIN CONTACT FLUSH WITH LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION OR ADVICE. IMMEDIATELY TAKE OFF ALL CONTAMINATED CLOTHING. WASH CONTAMINATED CLOTHING BEFORE REUSE.
INGESTION..... IF THE MATERIAL IS SWALLOWED, GET IMMEDIATE MEDICAL ATTENTION OR ADVICE. DO NOT INDUCE VOMITING.
INHALATION..... IF SYMPTOMS ARE EXPERIENCED, REMOVE SOURCE OF CONTAMINATION OR MOVE VICTIM TO FRESH AIR. IF SYMPTOMS PERSIST, GET MEDICAL ATTENTION. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN. SEEK MEDICAL ATTENTION.
NOTES TO PHYSICIAN..... IF THE PRODUCT IS INGESTED, PROBABLE MUCOSAL DAMAGE MAY CONTRAINDICATE THE USE OF GASTRIC LAVAGE. TREAT THE AFFECTED PERSON APPROPRIATELY.

Section 05: FIRE FIGHTING MEASURES

T.D.G. FLAM. CLASS..... 3.
FLAMMABILITY
IF YES, UNDER WHICH CONDITIONS?
EXTINGUISHING MEDIA..... DRY CHEMICAL, FOAM, CARBON DIOXIDE, WATER FOG. USE WATER TO COOL FIRE-EXPOSED CONTAINERS AND TO PROTECT PERSONNEL.
SPECIAL PROCEDURES..... FIREFIGHTERS SHOULD WEAR FULL FIRE-FIGHTING TURN-OUT GEAR (FULL BUNKER GEAR) INCLUDING NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE.

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Section 05: FIRE FIGHTING MEASURES

UNUSUAL FIRE AND EXPLOSION HAZARDS PRODUCT CONTAINS A FLAMMABLE SOLVENT. VAPORS MAY BE RELEASED THAT TRAVEL LONG DISTANCES, IGNITE AND FLASH BACK.

FLASH POINT (C), METHOD..... > 27.8 °C (82 F) PMCC.

AUTO IGNITION TEMPERATURE..... N.AV.

UPPER FLAMMABLE LIMIT (% BY VOL.).... N.AV.

LOWER FLAMMABLE LIMIT (% BY VOL.)... N.AV.

EXPLOSION DATA..... N.AV.

EXPLOSIVE POWER..... N.AV.

RATE OF BURNING..... N.AV.

SENSITIVITY TO STATIC DISCHARGE..... N.AV.

SENSITIVITY TO IMPACT..... N.AV.

HAZARDOUS COMBUSTION PRODUCTS.. SEE HAZARDOUS DECOMPOSITION PRODUCTS.

Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL..... EMERGENCY ACTION: ISOLATE SPILL OR LEAK AREA IMMEDIATELY.KEEP UNAUTHORIZED PERSONNEL AWAY.STAY UPWIND.KEEP OUT OF LOW AREAS. VENTILATE CLOSED SPACES BEFORE ENTERING. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT DURING CLEANUP.ELIMINATE ALL IGNITION SOURCES (NO SMOKING, FLARES, SPARKS OR FLAMES IN IMMEDIATE AREA).DO NOT TOUCH OR WALK THROUGH SPILLED MATERIAL.ALL EQUIPMENT USED WHEN HANDLING THE PRODUCT MUST BE GROUNDED.SMALL SPILLS:ABSORB WITH EARTH, SAND OR OTHER NON-COMBUSTIBLE MATERIAL AND TRANSFER TO CONTAINERS FOR LATER DISPOSAL.USE CLEAN NON-SPARKING TOOLS TO COLLECT ABSORBED MATERIAL. LARGE SPILLS:DIKE AHEAD OF LIQUID SPILL FOR LATER DISPOSAL. DO NOT DISCHARGE EFFLUENT CONTAINING THIS PRODUCT INTO LAKES, STREAMS, PONDS, ESTUARIES, OCEANS OR OTHER WATERS UNLESS IN ACCORDANCE WITH THE REQUIREMENTS OF A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND THE PERMITTING AUTHORITY HAS BEEN NOTIFIED IN WRITING PRIOR TO DISCHARGE. DO NOT DISCHARGE EFFLUENT CONTAINING THIS PRODUCT TO SEWER SYSTEMS WITHOUT PREVIOUSLY NOTIFYING THE LOCAL SEWAGE TREATMENT PLANT AUTHORITY. FOR GUIDANCE, CONTACT YOUR STATE WATER BOARD OR REGIONAL OFFICE OF THE EPA. SURFACES MAY BECOME SLIPPERY AFTER SPILLAGE.

Section 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND EQUIPMENT AVOID CONTACT WITH SKIN AND EYES.AVOID BREATHING VAPORS OR MISTS OF THIS PRODUCT.KEEP THIS PRODUCT FROM HEAT, SPARKS, OR OPEN FLAME.WASH THOROUGHLY AFTER HANDLING.AS WITH ALL CHEMICALS, GOOD INDUSTRIAL HYGIENE PRACTICES SHOULD BE FOLLOWED WHEN HANDLING THIS MATERIAL.

STORAGE NEEDS..... DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL.KEEP THIS MATERIAL IN A COOL, WELL-VENTILATED PLACE.DO NOT HANDLE OR STORE NEAR AN OPEN FLAME, HEAT OR OTHER SOURCES OF IGNITION.PREVENT ELECTROSTATIC CHARGE BUILDUP BY USING COMMON BONDING AND GROUNDING TECHNIQUES.

Section 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

GLOVES/ TYPE..... USE IMPERVIOUS GLOVES.

RESPIRATORY/TYPE..... IF VAPORS ARE PRESENT OR IRRITATION IS EXPERIENCED, NIOSH APPROVED RESPIRATORY PROTECTION FOR AMMONIACAL VAPORS SHOULD BE WORN. VENTILATION AND OTHER FORMS OF ENGINEERING CONTROLS ARE OFTEN THE PREFERRED MEANS FOR CONTROLLING CHEMICAL EXPOSURES. RESPIRATORY PROTECTION MAY BE NEEDED FOR NON-ROUTINE OR EMERGENCY SITUATIONS.

EYE/TYPE..... WEAR CHEMICAL GOGGLES, FACE SHIELD.

FOOTWEAR/TYPE..... IMPERMEABLE BOOTS.

CLOTHING/TYPE..... WORK CLOTHING SUFFICIENT TO PREVENT ALL SKIN CONTACT SHOULD BE WORN, SUCH AS COVERALLS AND LONG SLEEVES.

OTHER/TYPE..... EYE WASH FOUNTAIN AND EMERGENCY SHOWERS ARE RECOMMENDED.

ENGINEERING CONTROLS..... PROVIDE ADEQUATE LOCAL EXHAUST VENTILATION TO MAINTAIN WORKER EXPOSURE BELOW EXPOSURE LIMITS.

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... CLEAR LIQUID.

ODOUR..... CHARACTERISITC.

ODOUR THRESHOLD..... N.AV.

VAPOUR PRESSURE (MMHG)..... NOT DETERMINED.

VAPOUR DENSITY (AIR=1)..... ESTIMATED HEAVIER THAN AIR.

BY VOLUME..... N.AV.

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Section 09: PHYSICAL AND CHEMICAL PROPERTIES

BY WEIGHT..... N.AV.
 EVAPORATION RATE..... N.AV.
 BOILING POINT..... N.AV.
 PH..... N.AV.
 SPECIFIC GRAVITY (WATER=1)..... >0.938 G/ML.
 SOLUBILITY IN WATER (% W/W)..... SOLUBLE.
 COEFFICIENT OF WATER/OIL DIST..... N.AV.

Section 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:
 YES..... STABLE UNDER NORMAL CONDITIONS.
 NO, WHICH CONDITIONS?
 CONDITIONS TO AVOID..... KEEP AWAY FROM HEAT, SPARKS, OR OPEN FLAME.
 COMPATABILITY WITH OTHER
 SUBSTANCES:
 YES
 NO, WHICH ONES?..... THIS PRODUCT MAY REACT WITH STRONG OXIDIZING AGENTS, ANIONIC
 COMPOUNDS.
 REACTIVITY CONDITIONS:..... CONTACT WITH INCOMPATIBLES.
 HAZARDOUS PRODUCTS OF UPON DECOMPOSITION, THIS PRODUCT MAY YIELD OXIDES OF NITROGEN AND
 DECOMPOSITION AMMONIA. CARBON MONOXIDES AND CARBON DIOXIDE.
 HAZARDOUS POLYMERIZATION..... WILL NOT OCCUR.

Section 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL..... FOR ETHANOL (64-17-5): ACGIH - THRESHOLD LIMITS VALUES - TIME WEIGHTED
 AVERAGES (TLV-TWA) 1000 PPM TWA.
 LC 50 OF MATERIAL, SPECIES & ROUTE.. ETHANOL 64-17-5: TOXICOLOGY DATA - SELECTED LC50S INHALATION LC50 RAT:
 124.7 MG/L/4H.
 LD 50 OF MATERIAL, SPECIES & ROUTE.. ORAL LD50 (RAT) = >50 - 500 MG/KG. ALKYL DIMETHYL BENZYL AMMONIUM
 CHLORIDE (C12-16), 68424-85-1: TOXICOLOGY DATA - SELECTED LD50S AND
 LC50S ORAL LD50 RAT: 426 MG/KG. ETHANOL 64-17-5: TOXICOLOGY DATA -
 SELECTED LD50S, ORAL LD50 RAT: 1501 MG/KG.
 CARCINOGENICITY OF MATERIAL..... NOT LISTED AS CARCINOGENIC ACCORDING TO IARC, NTP OR OSHA.
 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 INFORMATION..... VERY TOXIC TO AQUATIC ORGANISMS. ENVIRONMENTAL FATE THIS PRODUCT IS
 BIODEGRADABLE.

Section 13: DISPOSAL CONSIDERATIONS

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

Section 14: TRANSPORT INFORMATION

TDG CLASSIFICATION..... 8 (3).
 PROPER SHIPPING NAME..... CORROSIVE LIQUID, FLAMMABLE N.O.S. (QUATERNARY AMMONIUM CHLORIDE,
 ETHANOL).
 UN NUMBER..... 2920.
 PACKING GROUP..... II.
 SPECIAL SHIPPING INSTRUCTIONS..... N.AV.

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

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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.