



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

PRODUCT: FILTER-NU

CODE: MUR0007

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..... FILTER-NU
PRODUCT CODE..... MUR0007
CHEMICAL FORMULA..... MIXTURE.
MOLECULAR WEIGHT..... MIXTURE.
CHEMICAL FAMILY..... MIXTURE.
MATERIAL USE..... SWIMMING POOL FILTER TREATMENT.
EMERGENCY PHONE NO..... CANUTEC (613)-996-6666.

Section 02: HAZARDS IDENTIFICATION

ROUTE OF ENTRY:
SKIN CONTACT..... CONCENTRATED SOLUTIONS MAY CAUSE SEVERE BURNS IF NOT WASHED OFF IMMEDIATELY. DERMATITIS MAY OCCUR FROM PROLONGED OR REPEATED SKIN CONTACT. .
SKIN ABSORPTION..... N.AV.
EYE CONTACT..... MISTS MAY CAUSE EYE IRRITATION. EYE SPLASHES WITH CONCENTRATED SOLUTIONS MAY CAUSE SEVERE BURNS AND PERMANENT EYE DAMAGE. .
INHALATION..... VAPOUR OR MIST MAY CAUSE IRRITATION OF THE NOSE AND THROAT.
INGESTION..... CORROSIVE TO DIGESTIVE TRACT. CAUSES STOMACH PAIN, DIARRHEA AND CONVULSIONS. IN VERY SEVERE CASES, COLLAPSE AND DEATH. .
EFFECTS OF ACUTE EXPOSURE..... SEE ABOVE.
EFFECTS OF CHRONIC EXPOSURE..... SEE ABOVE.

Section 03: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	%	Exposure Limit	C.A.S.#	LD/50, Route,Species	LC/50 Route,Species
PHOSPHORIC ACID	30-60	1 MG/M3	7664-38-2	1530 MG/KG (ORAL, RAT)	4701 PPM/30 M (75%)
NONYLPHENOL ETHOXYLATE	1-5	N.AV.	9016-45-9	1310 MG/KG (ORAL, RAT); >50 MG/KG (ORAL, MOUSE); 2 ML/KG (DERMAL, RABBIT)	N.AV.
ETHYLENE GLYCOL MONOBUTYL ETHER	1-5	20 PPM TWA ACGIG	111-76-2	470-3000 MG/KG (ORAL, RAT); 220 MG/KG (ORAL, RABBIT); >2000 MG/KG (ORAL, GUINEA PIG)	700 PPM/7H (RAT)

Section 04: FIRST AID MEASURES

EYE CONTACT..... IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR A MINIMUM OF 30 MINUTES. HOLD EYELIDS OPEN DURING FLUSHING. DO NOT TRANSPORT VICTIM UNTIL THE RECOMMENDED FLUSHING PERIOD IS COMPLETED UNLESS FLUSHING CAN BE CONTINUED DURING TRANSPORT. .
SKIN CONTACT..... FLUSH SKIN WITH RUNNING WATER FOR A MINIMUM OF 30 MINUTES. START FLUSHING WHILE REMOVING CONTAMINATED CLOTHING. IF IRRITATION PERSISTS, REPEAT FLUSHING. OBTAIN MEDICAL ATTENTION IMMEDIATELY. DO NOT TRANSPORT VICTIM UNLESS THE RECOMMENDED FLUSHING PERIOD IS COMPLETED OR FLUSHING CAN BE CONTINUED DURING TRANSPORT. .
INHALATION..... N.AV.
INGESTION..... GIVE WATER OR MILK TO DILUTE. DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.
NOTES TO PHYSICIAN..... CONTAINS 30-60% PHOSPHORIC ACID WHICH IS A MODERATELY CORROSIVE AGENT WHICH MAY BURN ANY EXPOSED TISSUES UPON OTHER THAN VERY BRIEF CONTACT. EYES, SKIN AND MUCOUS MEMBRANES SHOULD BE FLUSHED

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Section 04: FIRST AID MEASURES

NOTES TO PHYSICIAN..... THOROUGHLY WITH WATER AND OPHTHALMOLOGIC CONSULTATION SHOULD BE OBTAINED FOR ANY CORNEAL BURNS. IN CASES OF INGESTION, IMMEDIATE DILUTION WITH WATER, MILK OR DEMULCENTS IS WORTHWHILE, BUT ATTEMPTS TO NEUTRALIZE WITH A BASE SHOULD BE AVOIDED BECAUSE OF EXCESSIVE GAS AND HEAT FORMATION, WHICH MAY INCREASE THE THREAT OF ESOPHAGOGASTRIC PERFORATION. VOMITING AND DIARRHEA (LAXATIVE EFFECT OF PHOSPHATES) ARE EXPECTED WITH LARGE DOSES. PARENTRAL FLUID ADMINISTRATION MAY BE NEEDED IF LOSSES THEREFROM ARE SEVERE, OR IF SHOCK ENSUES. SUPPORTIVE CARE MAY BE NEEDED FOR SUCH OTHER COMPLICATIONS AS GLOTTAL EDEMA, HEMATEMESIS AND PERFORATION (UNLIKELY). INDUCED VOMITING SHOULD BE AVOIDED BECAUSE LOCAL TISSUE INJURY MAY BE AGGRAVATED, BUT THE PATIENT SHOULD BE WATCHED FOR HYPERPHOSPHATEMIA AND HYPOCALCEMIA. MILK OR OTHER DEMULCENTS MAY BE WORTHWHILE FOR GASTRIC IRRITATION. .

Section 05: FIRE FIGHTING MEASURES

T.D.G. FLAM. CLASS..... NON FLAMMABLE.
 FLAMMABILITY..... NON FLAMMABLE.
 IF YES, UNDER WHICH CONDITIONS?
 EXTINGUISHING MEDIA..... CARBON DIOXIDE, DRY CHEMICAL, ALCOHOL FOAM, WATER FOG.
 SPECIAL PROCEDURES..... FIREFIGHTERS SHOULD WEAR USUAL PROTECTIVE GEAR AND SELF-CONTAINED BREATHING APPARATUS. .
 FLASH POINT (C), METHOD..... >68 C.
 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.. FUMES PRODUCED WHEN HEATED TO DECOMPOSITION MAY INCLUDE PRODUCTS PHOSPHOROUS OXIDES. . CARBON DIOXIDE, CARBON MONOXIDE.

Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL..... CONTAIN SPILL. ABSORB WITH AN INERT ABSORBENT. COLLECT IN SUITABLE AND PROPERLY LABELED CONTAINERS. DISPOSE IN ACCORDANCE WITH LOCAL, PROVINCIAL AND FEDERAL REGULATIONS. ONLY TRAINED AND PROPERLY PROTECTED PERSONNEL SHOULD BE INVOLVED IN SPILL CLEANUP OPERATIONS.

Section 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND USE STAINLESS STEEL EQUIPMENT. AVOID CONTACT WITH EYES. AVOID EQUIPMENT BREATHING VAPOR OR MIST. DO NOT INGEST. WASH THOROUGHLY AFTER HANDLING.
 STORAGE NEEDS..... KEEP AWAY FROM ALKALIS AND ACTIVE METALS. STORE IN DRY, COOL PLACE. STORAGE AREAS SHOULD BE WELL VENTILATED . STORE AWAY FROM ALL SOURCES OF HEAT AND IGNITION.

Section 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

GLOVES/ TYPE..... RUBBER OR PLASTIC GLOVES.
 RESPIRATORY/TYPE..... IN MISTY ATMOSPHERES USE AN APPROVED MIST RESPIRATOR. IF RESPIRATORY IRRITATION IS EXPERIENCED, USE AN APPROVED AIR-PURIFYING RESPIRATOR. .
 EYE/TYPE..... CHEMICAL SAFETY GOGGLES.
 FOOTWEAR/TYPE..... RUBBER SAFETY BOOTS.
 CLOTHING/TYPE..... USE PROTECTIVE CLOTHING IMPERVIOUS TO THIS MATERIAL. SELECTION OF SPECIFIC ITEMS SUCH AS FACESHIELD, GLOVES, BOOTS, APRON, OR FULL-BODY SUIT WILL DEPEND ON OPERATION.
 OTHER/TYPE..... EYEWASH STATION AND SAFETY SHOWER IN WORK AREA.
 ENGINEERING CONTROLS..... GOOD GENERAL VENTILATION IS SUFFICIENT UNDER NORMAL CONDITIONS. LOCAL EXHAUST REQUIRED IF MIST OR VAPOUR IS GENERATED.

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Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... LIQUID.
 COLOR..... LIGHT AMBER.
 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..... >100 C.
 PH..... <1.
 SPECIFIC GRAVITY (WATER=1)..... 1.2.
 SOLUBILITY IN WATER (% W/W)..... N.AV. 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 INCOMPATIBLES.
 COMPATABILITY WITH OTHER
 SUBSTANCES:
 YES
 NO, WHICH ONES?..... ALKALIS, ACTIVE METALS (EG. FE, ZN, AL).
 REACTIVITY CONDITIONS:..... CONTACT WITH INCOMPATIBLES. REACTION WITH ACTIVE METALS LIBERATES
 HYDROGEN WHICH COULD CREATE AN EXPLOSIVE ATMOSPHERE IN A CONFINED
 SPACE.
 HAZARDOUS PRODUCTS OF EXPOSURE TO FIRE MAY LIBERATE PHOSPHORUS OXIDES. CARBON OXIDE,
 DECOMPOSITION CARBON DIOXIDE.
 HAZARDOUS POLYMERIZATION..... WILL NOT OCCUR.

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..... CONTAINS ETHYLENE GLYCOL MONOBUTYL ETHER, FOR WHICH: IN LONG-TERM
 ANIMAL STUDIES WITH ETHYLENE GLYCOL BUTYL ETHER, SMALL BUT
 STATISTICALLY SIGNIFICANT INCREASES IN TUMORS WERE OBSERVED IN MICE
 BUT NOT RATS. THE EFFECTS ARE NOT BELIEVED TO BE RELEVANT TO HUMANS.
 IF THE MATERIAL IS HANDLED IN ACCORDANCE WITH PROPER INDUSTRIAL
 HANDLING, EXPOSURES SHOULD NOT POSE A CARCINOGENIC RISK TO MAN.
 REPRODUCTIVE EFFECTS..... CONTAINS ETHYLENE GLYCOL MONOBUTYL ETHER, FOR WHICH: IN ANIMAL
 STUDIES, EFFECTS ON REPRODUCTION HAVE BEEN SEEN ONLY AT DOSES THAT
 PRODUCED SIGNIFICANT TOXICITY TO THE PARENT ANIMALS.
 IRRITANCY OF MATERIAL..... SEE SECTION 03.
 SENSITIZING CAPABILITY OF MATERIAL. N.AV.
 SYNERGISTIC MATERIALS..... N.AV.
 GENETIC TOXICITY..... CONTAINS ETHYLENE GLYCOL MONOBUTYL ETHER, FOR WHICH: IN VITRO
 MUTAGENICITY STUDIES WERE PREDOMINANTLY NEGATIVE. IN VIVO ANIMAL
 MUTAGENICITY STUDIES WERE NEGATIVE.
 SIGNIFICANT DATA WITH POSSIBLE CONTAINS ETHYLENE GLYCOL MONOBUTYL ETHER, FOR WHICH: IN ANIMALS,
 RELEVANCE TO HUMANS EFFECTS HAVE BEEN REPORTED ON THE FOLLOWING ORGANS: BLOOD
 (HEMOLYSIS). SECONDARY EFFECTS TO THE KIDNEY AND LIVER. HUMAN RED
 BLOOD CELLS HAVE BEEN SHOWN TO BE SIGNIFICANTLY LESS SENSITIVE TO
 HEMOLYSIS THAN THOSE OF RODENTS AND RABBITS.
 DEVELOPMENTAL TOXICITY..... CONTAINS ETHYLENE GLYCOL MONOBUTYL ETHER, FOR WHICH: DID NOT CAUSE
 BIRTH DEFECTS IN LABORATORY ANIMALS. HAS BEEN TOXIC TO THE FETUS IN
 LAB ANIMALS AT DOSES TOXIC TO THE MOTHER.
 TERATOGENICITY..... N.AV.

Section 12: ECOLOGICAL CONSIDERATIONS

ECOLOGICAL INFORMATION..... N.AV.

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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. (PHOSPHORIC ACID).
UN NUMBER..... 1760.
PACKING GROUP..... II.
SPECIAL SHIPPING INSTRUCTIONS..... NO SPECIAL SHIPPING REQUIREMENTS.

Section 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION..... E. D1A. D1B.
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.