



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

PRODUCT: NU-BLU

CODE: MUR0041

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..... NU-BLU
PRODUCT CODE..... MUR0041
CHEMICAL FORMULA..... AL₂(OH)XCL₆-X 0<X>6.
MOLECULAR WEIGHT..... N.AV.
CHEMICAL FAMILY..... POLYNUCLEAR INORGANIC SALT.
MATERIAL USE..... COAGULANT FOR THE TREATMENT OF SWIMMING POOLS AND SPA WATERS.
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
POLYALUMINUM CHLORIDE	8-24	SEE SECTION 11	1327-41-9	SEE SECTION 11	SEE SECTION 11

Section 03: HAZARDS IDENTIFICATION

ROUTE OF ENTRY:
SKIN CONTACT..... SEE BELOW.
SKIN ABSORPTION..... N.AV.
EYE CONTACT..... SEE BELOW.
INHALATION..... SEE BELOW.
INGESTION..... SEE BELOW.
EFFECTS OF ACUTE EXPOSURE..... CORROSIVE. IRRITATING TO SKIN, EYES, AND MUCOUS MEMBRANES.
EFFECTS OF CHRONIC EXPOSURE..... N.AV.
INHALATION, CHRONIC..... N.AV.

Section 04: FIRST AID MEASURES

GENERAL:..... IF YOU FEEL UNWELL, SEEK MEDICAL ATTENTION (SHOW THE LABEL OR THIS MSDS IF POSSIBLE). ENSURE THAT MEDICAL PERSONNEL ARE AWARE OF THE MATERIAL(S) INVOLVED.
EYE CONTACT..... FLUSH IMMEDIATELY WITH WATER FOR AT LEAST 15 MINUTES, OCCASIONALLY LIFTING UPPER AND LOWER LIDS TO BE SURE RINSING IS COMPLETE. GET MEDICAL ATTENTION.
SKIN CONTACT..... REMOVE ALL CONTAMINATED CLOTHING, JEWELRY, AND SHOES. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE. WASH AFFECTED AREA WITH SOAP OR MILD DETERGENT AND RUNNING WATER FOR AT LEAST 15 MINUTES. IF IRRITATION DEVELOPS, GET MEDICAL ATTENTION.
INGESTION..... IF CONSCIOUS, DRINK WATER OR MILK OF MAGNESIA. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION.
INHALATION..... MOVE TO FRESH AIR. OBTAIN MEDICAL ATTENTION IF COUGH OR OTHER RESPIRATORY SYMPTOMS DEVELOP.
NOTES TO PHYSICIAN..... N.AV.

Section 05: FIRE FIGHTING MEASURES

T.D.G. FLAM. CLASS..... NON FLAMMABLE.
FLAMMABILITY..... NON FLAMMABLE.
IF YES, UNDER WHICH CONDITIONS?
EXTINGUISHING MEDIA..... THE SUBSTANCE IS NOT COMBUSTIBLE. USE EXTINGUISHING MEDIA APPROPRIATE TO THE SURROUNDING FIRE.
SPECIAL PROCEDURES..... CONTAINERS CAN BUILD UP PRESSURE IN THE EVENT OF A FIRE. AS IN ANY FIRE, WEAR SCBA, PRESSURE DEMAND, PRESSURE-DEMAND AND FULL PROTECTIVE EQUIPMENT. DURING A FIRE, IRRITATING/TOXIC AND CORROSIVE FUMES MAY EVOLVE.
FLASH POINT (C), METHOD..... N.AP.
AUTO IGNITION TEMPERATURE..... N.AV.
UPPER FLAMMABLE LIMIT (% BY VOL.).... N.AP.
LOWER FLAMMABLE LIMIT (% BY VOL.)... N.AP.
EXPLOSION DATA..... N.AV.
EXPLOSIVE POWER..... N.AV.

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Section 05: FIRE FIGHTING MEASURES

RATE OF BURNING..... DOES NOT BURN.
 SENSITIVITY TO STATIC DISCHARGE..... N.AV.
 SENSITIVITY TO IMPACT..... N.AV.
 HAZARDOUS COMBUSTION PRODUCTS.. HYDROGEN CHLORIDE MAY BE RELEASED IN A FIRE. ALUMINUM OXIDE AND OXIDES OF SULFUR.

Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL..... RESTRICT ACCESS UNTIL CLEAN-UP OPERATIONS ARE COMPLETE. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT PER SECTION 8. ENSURE TRAINED PERSONNEL CONDUCT CLEAN UP AND WEAR PERSONAL PROTECTIVE EQUIPMENT PER SECTION 8. STOP DISCHARGE IF POSSIBLE. AVOID PERSONAL RISK. SMALL SPILLS: ABSORB SPILL WITH CLAY OR DRY MATERIAL AND COLLECT IN APPROPRIATE CONTAINER FOR DISPOSAL. LARGE SPILLS: PREVENT ENTRY INTO SEWERS AND CONFINED AREAS. DIKE, IF POSSIBLE. KEEP UNNECESSARY PEOPLE AWAY, ISOLATE AREA AND DENY ENTRY. COLLECT IN APPROPRIATE CONTAINER FOR DISPOSAL. NEUTRALIZE SPILL RESIDUALS CAREFULLY WITH LIME, LIMESTONE, OR SODA ASH AND COLLECT IN A SUITABLE CONTAINER FOR DISPOSAL. FLUSH AREA WITH WATER. NOTIFY THE APPROPRIATE ENVIRONMENTAL AUTHORITIES.

Section 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND EQUIPMENT HANDLE ALL CHEMICALS WITH RESPECT. REVIEW THE LABEL, THIS MSDS AND ANY OTHER APPLICABLE INFORMATION BEFORE USE. KEEP SEPARATED FROM INCOMPATIBLE SUBSTANCES. USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT PER SECTION 8. HANDLE ONLY WITH EQUIPMENT, MATERIALS AND SUPPLIES SPECIFIED BY THEIR MANUFACTURER AS BEING COMPATIBLE AND APPROPRIATE FOR USE WITH THIS PRODUCT.
 STORAGE NEEDS..... MATERIAL MAY BE STORED IN TIGHTLY CLOSED SHIPPING CONTAINERS, PREFERABLY THE SUPPLIER'S CONTAINERS. CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTY, SINCE THEY RETAIN PRODUCT RESIDUES (VAPORS, LIQUID); OBSERVE ALL WARNINGS AND PRECAUTIONS LISTED FOR THE PRODUCT. DO NOT USE METAL CONTAINERS.

Section 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

GLOVES/ TYPE..... WEAR IMPERVIOUS PROTECTIVE CLOTHING, INCLUDING BOOTS, GLOVES, LAB COAT, APRON OR COVERALLS, AS APPROPRIATE, TO AVOID SKIN CONTACT.
 RESPIRATORY/TYPE..... RECOMMENDED PROTECTIVE MATERIAL: NEOPRENE, NEVER USE LEATHER. CONSIDER RESPIRATOR WARNING PROPERTIES BEFORE USE. WITH LIMITED CONTACT USE AN APPROPRIATE CHEMICAL CARTRIDGE RESPIRATOR WITH ACID GAS CARTRIDGE(S). WHEN CLEANING, DECONTAMINATING OR PERFORMING MAINTENANCE ON TANKS, CONTAINERS, PIPING SYSTEMS AND ACCESSORIES, AND IN ANY OTHER SITUATIONS WHERE AIRBORNE CONTAMINANTS AND/OR DUST COULD BE GENERATED, USE PROTECTIVE EQUIPMENT TO PROTECT AGAINST INGESTION OR INHALATION. HEPA OR AIR SUPPLIED RESPIRATOR, FULL PROTECTIVE COVERALLS WITH HEAD COVER, GLOVES AND BOOTS OR CHEMICAL SUITS, AND BOOTS ARE SUGGESTED.
 EYE/TYPE..... WEAR SPLASH RESISTANT CHEMICAL GOGGLES AND, WHERE SPLASHING IS POSSIBLE, A FULL FACE SHIELD.
 FOOTWEAR/TYPE..... SEE GLOVE SECTION.
 CLOTHING/TYPE..... SEE GLOVE SECTION.
 OTHER/TYPE..... MAINTAIN EYE WASH FOUNTAIN AND QUICK-DRENCH FACILITIES IN WORK AREA.
 ENGINEERING CONTROLS..... THERE SHOULD BE ENOUGH LOCAL VENTILATION TO CIRCULATE AIR. ENSURE THAT EYEWASH STATION AND SAFETY SHOWERS ARE PROXIMAL TO THE WORKSTATION LOCATION.

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... CLEAR BLUE LIQUID.
 ODOUR..... PUNGENT CHLORINE-LIKE ODOUR.
 ODOUR THRESHOLD..... N.AV.
 VAPOUR PRESSURE (MMHG)..... CA. 18 MM HG AT 20 C.
 VAPOUR DENSITY (AIR=1)..... 1.3.
 BY VOLUME..... N.AV.
 BY WEIGHT..... N.AV.
 EVAPORATION RATE..... N.AV.
 BOILING POINT..... 100-110 C.
 PH..... 0.5-4.4.
 SPECIFIC GRAVITY (WATER=1)..... 1.15 – 1.40 @ 25 C.
 SOLUBILITY IN WATER (% W/W)..... SOLUBLE.
 COEFFICIENT OF WATER/OIL DIST..... N.AV.

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Section 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:
 YES..... STABLE AT NORMAL TEMPERATURES AND PRESSURE.
 NO, WHICH CONDITIONS?
 CONDITIONS TO AVOID..... AVOID CONTACT WITH MINERAL ACIDS, EXCESSIVE HEAT AND BASES/ALKALIS.
 COMPATABILITY WITH OTHER
 SUBSTANCES:
 YES
 NO, WHICH ONES?..... CARBON STEEL, ALUMINUM, CARBON, BRASSES, AND NYLON.
 REACTIVITY CONDITIONS:..... CONTACT WITH INCOMPATIBLES.
 HAZARDOUS PRODUCTS OF THERMAL DECOMPOSITION: AFTER COMPLETELY DRY AND HEATED TO
 DECOMPOSITION DECOMPOSITION WILL PRODUCE SULFUR OXIDES AND ALUMINUM OXIDES AS
 WELL AS HCL GAS.
 HAZARDOUS POLYMERIZATION..... WILL NOT OCCUR.

Section 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL..... ACGIH TWA: 2 MG/M3 (AS AL).
 LC 50 OF MATERIAL, SPECIES & ROUTE.. N.AV.
 LD 50 OF MATERIAL, SPECIES & ROUTE.. N.AV.
 CARCINOGENICITY OF MATERIAL..... DOES NOT CONTAIN ANY KNOWN CARCINOGENS OR POTENTIAL CARCINOGENS.
 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..... N.AV.

Section 13: DISPOSAL CONSIDERATIONS

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

Section 14: TRANSPORT INFORMATION

TDG CLASSIFICATION..... 8.
 UN NUMBER..... 3264.
 PACKING GROUP..... III.
 SPECIAL SHIPPING INSTRUCTIONS..... CORROSIVE MATERIAL.

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..... E.

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.