



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

PRODUCT: POLISH PLUS

CODE: MUR0043

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..... POLISH PLUS
PRODUCT CODE..... MUR0043
CHEMICAL FORMULA..... MIXTURE.
MOLECULAR WEIGHT..... MIXTURE.
CHEMICAL FAMILY..... MIXTURE.
MATERIAL USE..... FLOCCULANT.
EMERGENCY PHONE NO..... CANUTEC (613)-996-6666.

Section 02: HAZARDS IDENTIFICATION

ROUTE OF ENTRY:
SKIN CONTACT..... MAY CAUSE IRRITATION.
SKIN ABSORPTION..... N.AV.
EYE CONTACT..... SEE BELOW.
INHALATION..... N.AV.
INGESTION..... N.AV.
EFFECTS OF ACUTE EXPOSURE..... SEE ABOVE.
EFFECTS OF CHRONIC EXPOSURE..... NONE KNOWN.
EFFECTS OF OVEREXPOSURE..... THE ACUTE ORAL (RAT) LD50, ACUTE DERMAL (RABBIT) LD50 AND 4-HOUR
INHALATION (RAT) LC50 VALUES FOR THIS MATERIAL ARE 4,670 MG/KG, >10,000
MG/KG AND >15,000 PPM, RESPECTIVELY. NO EYE IRRITATION WAS PRODUCED
DURING PRIMARY IRRITATION TESTING WITH RABBITS. NO SIGNS OF DERMAL
IRRITATION OR SENSITIZATION WERE PRODUCED DURING REPEAT INSULT
PATCH TEST WITH HUMAN SUBJECTS.

Section 03: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	%	Exposure Limit	C.A.S.#	LD/50, Route,Species	LC/50 Route,Species
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NO REGULATED
COMPONENTS**Section 04: FIRST AID MEASURES**

EYE CONTACT..... RINSE IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES.
SKIN CONTACT..... WASH IMMEDIATELY WITH PLENTY OF WATER AND SOAP.
INHALATION..... MATERIAL IS NOT EXPECTED TO BE HARMFUL IF INHALED. REMOVE TO FRESH
AIR.
INGESTION..... MATERIAL IS NOT EXPECTED TO BE HARMFUL BY INGESTION. NO SPECIFIC FIRST
AID MEASURES ARE REQUIRED.
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..... USE WATER SPRAY, CARBON DIOXIDE OR DRY CHEMICAL.
SPECIAL PROCEDURES..... FIREFIGHTERS, AND OTHERS EXPOSED, WEAR SELF-CONTAINED BREATHING
APPARATUS. KEEP CONTAINERS COOL BY SPRAYING WITH WATER IF EXPOSED
TO FIRE.
FLASH POINT (C), METHOD..... >93 °C 200 °F CLOSED CUP.
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.
RATE OF BURNING..... N.AV.
SENSITIVITY TO STATIC DISCHARGE..... N.AV.
SENSITIVITY TO IMPACT..... N.AV.
HAZARDOUS COMBUSTION PRODUCTS.. SEE HAZARDOUS DECOMPOSITION PRODUCTS.

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Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL..... WHERE EXPOSURE LEVEL IS NOT KNOWN, WEAR APPROVED, POSITIVE PRESSURE, SELF-CONTAINED RESPIRATOR. WHERE EXPOSURE LEVEL IS KNOWN, WEAR APPROVED RESPIRATOR SUITABLE FOR LEVEL OF EXPOSURE. IN ADDITION TO THE PROTECTIVE CLOTHING/EQUIPMENT IN SECTION 8 (EXPOSURE CONTROLS/PERSONAL PROTECTION), WEAR IMPERMEABLE BOOTS. PRODUCT MAY CAUSE A SLIP HAZARD. SPILLED MATERIAL SHOULD BE ABSORBED ONTO AN INERT MATERIAL AND SCOOPED UP. FLUSH SPILL AREA WITH WATER. IF SLIPPERINESS REMAINS APPLY MORE DRY-SWEEPING COMPOUND.

Section 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND AVOID CONTACT WITH SKIN AND CLOTHING. WASH THOROUGHLY AFTER EQUIPMENT HANDLING.
STORAGE NEEDS..... TO AVOID PRODUCT DEGRADATION AND EQUIPMENT CORROSION, DO NOT USE IRON, COPPER OR ALUMINUM CONTAINERS OR EQUIPMENT. STORE AT ROOM TEMPERATURE.

Section 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

GLOVES/ TYPE..... AVOID SKIN CONTACT. WEAR IMPERMEABLE GLOVES.
RESPIRATORY/TYPE..... FOR OPERATIONS WHERE INHALATION EXPOSURE CAN OCCUR, USE AN APPROVED RESPIRATOR RECOMMENDED BY AN INDUSTRIAL HYGIENIST AFTER AN EVALUATION OF THE OPERATION. WHERE INHALATION EXPOSURE CAN NOT OCCUR, NO RESPIRATORY PROTECTION IS REQUIRED.
EYE/TYPE..... WEAR EYE/FACE PROTECTION SUCH AS CHEMICAL SPLASH PROOF GOGGLES OR FACE SHIELD.
FOOTWEAR/TYPE..... PROTECTIVE BOOTS.
CLOTHING/TYPE..... AVOID CONTACT WITH SKIN.
OTHER/TYPE..... BEFORE EATING, DRINKING, OR SMOKING, WASH FACE AND HANDS THOROUGHLY WITH SOAP AND WATER.
ENGINEERING CONTROLS..... ENGINEERING CONTROLS ARE NOT NECESSARY IF GOOD HYGIENE PRACTICES ARE FOLLOWED.

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... COLORLESS TO AMBER LIQUID.
ODOUR..... AMINE.
ODOUR THRESHOLD..... N.AV.
VAPOUR PRESSURE (MMHG)..... N.AV.
VAPOUR DENSITY (AIR=1)..... N.AV.
BY VOLUME..... N.AV.
BY WEIGHT..... N.AV.
EVAPORATION RATE..... N.AV.
BOILING POINT..... ~100 C.
PH..... 5.0 - 6.0.
SPECIFIC GRAVITY (WATER=1)..... 1.05.
SOLUBILITY IN WATER (% W/W)..... 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.
COMPATIBILITY WITH OTHER
SUBSTANCES:
YES
NO, WHICH ONES?..... STRONG OXIDIZERS AND ACIDS. DO NOT USE ALUMINIUM, COPPER OR IRON IN FEED OR STORAGE SYSTEM.
REACTIVITY CONDITIONS..... CONTACT WITH INCOMPATIBLES.
HAZARDOUS PRODUCTS OF CARBON MONOXIDE (CO), CARBON DIOXIDE, AMMONIA (NH₃), OXIDES OF DECOMPOSITION NITROGEN, HYDROGEN CHLORIDE, DIMETHYLAMINE.
HAZARDOUS POLYMERIZATION..... WILL NOT OCCUR.

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Section 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL..... N.AV.
 LC 50 OF MATERIAL, SPECIES & ROUTE.. >15000 PPM (INH-RAT), 4 HOUR.
 LD 50 OF MATERIAL, SPECIES & ROUTE.. 4670 MG/KG (ORAL-RAT); >10000 MG/KG (ACUTE DERMAL-RABBIT).
 CARCINOGENICITY OF MATERIAL..... N.AV.
 REPRODUCTIVE EFFECTS..... N.AV.
 IRRITANCY OF MATERIAL..... SEE SECTION 2.
 SENSITIZING CAPABILITY OF MATERIAL. N.AV.
 SYNERGISTIC MATERIALS..... N.AV.
 MUTAGENICITY..... N.AV.
 TERATOGENICITY..... N.AV.

Section 12: ECOLOGICAL CONSIDERATIONS

ECOLOGICAL INFORMATION..... HARMFUL TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT. ACUTE TOXICITY TESTS CONDUCTED USING ENVIRONMENTALLY REPRESENTATIVE WATER GAVE THE FOLLOWING RESULTS: . ALGAE TEST RESULTS: TEST: ACUTE ALGA TOXICITY, SEAWATER (ISO 10253), DURATION: 72 HR, SPECIES: MARINE ALGAE (SKELETONEMA COSTATUM), 0.75 MG/L IC50; . TEST: GROWTH INHIBITION (OECD 201), DURATION: 96 HR., SPECIES: GREEN ALGAE (SELENASTRUM CAPRICORNUTUM), >10-100 MG/L IC50, INFORMATION BASED ON STRUCTURALLY SIMILAR MATERIAL; . FISH TEST RESULTS: TEST: ACUTE TOXICITY, FRESHWATER (OECD 203), SPECIES: ZEBRA FISH (BRACHYDANIO RERIO), >10-100 MG/L LC50, INFORMATION BASED ON STRUCTURALLY SIMILAR MATERIAL; . TEST: ACUTE TOXICITY, SEAWATER (PARCOM), SPECIES: JUVENILE TURBOT (SCOPHTHALMUS MAXIMUS), 1769 MG/L LC50; . INVERTEBRATE TEST RESULTS: TEST: ACUTE IMMOBILISATION (OECD 202), SPECIES: WATER FLEA (DAPHNIA MAGNA), >10-100 MG/L EC50, INFORMATION BASED ON STRUCTURALLY SIMILAR MATERIAL; . TEST: ACUTE INVERTEBRATE TOXICITY, SEAWATER (PARCOM), SPECIES: MARINE COPEPOD (ACARTIA TONSA), 204 MG/L EC50 IMMOBILIZATION. DEGRADATION: TEST: CO2 EVOLUTION: MODIFIED STURM (OECD 301B), DURATION: 28 DAY, <70 %, INFORMATION BASED ON A STRUCTURALLY AND COMPOSITIONALLY SIMILAR MATERIAL THIS MATERIAL IS NOT READILY BIODEGRADABLE (OECD 301B). THE LARGE POLYMER SIZE IS INCOMPATIBLE WITH TRANSPORT ACROSS BIOLOGICAL MEMBRANES AND DIFFUSION; THE BIOCONCENTRATION FACTOR IS THEREFORE CONSIDERED TO BE ZERO. TEST: CO2 EVOLUTION: MODIFIED STURM (OECD 301B) SEAWATER SHAKE FLASK METHOD (OECD 306), DURATION: 28 DAY PROCEDURE: READY BIODEGRADABILITY BIODEGRADABILITY IN SEAWATER, 0 %.

Section 13: DISPOSAL CONSIDERATIONS

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

Section 14: TRANSPORT INFORMATION

TDG CLASSIFICATION..... NOT REGULATED.
 UN NUMBER..... N.AP.
 PACKING GROUP..... N.AP.
 SPECIAL SHIPPING INSTRUCTIONS..... NOT REGULATED.

Section 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION..... THIS IS NOT A WHMIS CONTROLLED PRODUCT.
 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.