



MATERIAL SAFETY DATA SHEET

THERMO - GLOSS

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER'S NAME : ROCHESTER MIDLAND LIMITED
 MANUFACTURERS ADDRESS : 851 PROGRESS COURT, OAKVILLE, ONTARIO
 EMERGENCY PHONE NUMBER: CANUTEC (613) 996-6666
 SUPPLIER IDENTIFIER: NOT AVAILABLE
 SUPPLIER'S ADDRESS: NOT AVAILABLE
 SUPPLIER EMERGENCY
 PHONE NUMBER: NOT AVAILABLE
 PRODUCT NAME : THERMO-GLOSS
 PRODUCT USE : ULTRA HIGH SPEED FLOOR FINISH
 WHMIS CATEGORY: D2B
 PREPARED BY : ROCHESTER MIDLAND LIMITED.
 PHONE NUMBER OF PREPARER: (905) 847-3000
 DATE PREPARED: MARCH 1, 2010



SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	%	CAS#	EXPOSURE LEVELS	LD (50), ROUTE, SPECIES	LC(50), ROUTE, SPECIES
DIETHYLENE GLYCOL ETHYL ETHER	1-5	111-90-0	AIHA WEEL TWA 25 ppm	ORAL 1920-9050 mg/ Kg (RAT) DERMAL 4200µ l / Kg (RABBIT)	>5240 mg/m ³ 4 HOUR EXPOSURE (RAT)
DIPROPYLENE GLYCOL METHYL ETHER	0.5-1.5	34590-94-8	ACGIH TLV-TWA 100 ppm TLV-STEL 150 ppm OSHA TWA 100 ppm TLV-STEL 150 ppm IDLH: 600 ppm	ORAL 5400 mg/ Kg (RAT) DERMAL 10 ml/ Kg (RABBIT)	>500 ppm 7 HOUR EXPOSURE (RAT)
OTHER INGREDIENTS	%	CAS#	EXPOSURE LEVELS	LD (50), ROUTE, SPECIES	LC(50), ROUTE, SPECIES
ACRYLIC POLYMER MIXTURE	10-30	NOT AVAILABLE	NOT AVAILABLE	ORAL >5000 mg/ Kg (RAT) DERMAL >5000 mg/ Kg (RABBIT)	NOT AVAILABLE
TRIBUTOXYETHYL PHOSPHATE	1-5	78-51-3	NOT AVAILABLE	ORAL 3000 mg/ Kg (RAT) DERMAL >10000 mg/ Kg (RABBIT)	20 mg/ L 4 HOUR EXPOSURE (RAT)
ISODECYL BENZOATE	0.5-1.5	131298-44-7	NOT AVAILABLE	ORAL >5000 mg/ Kg (RAT) DERMAL >2000 mg/ Kg (RABBIT)	3.3 mg/ L 4 HOUR EXPOSURE (RAT)

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SECTION 03: HAZARDS IDENTIFICATION

POTENTIAL ACUTE HEALTH EFFECTS:

ROUTE OF ENTRY: EYES, SKIN, INHALATION, INGESTION

SKIN CONTACT: PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE IRRITATION.

SKIN ABSORPTION : GLYCOL ETHER COMPONENTS CAN BE ABSORBED THROUGH THE SKIN WITH PROLONGED OR WIDESPREAD SKIN CONTACT. NOT EXPECTED UNDER NORMAL USE CONDITIONS.

EYE: MAY CAUSE MODERATE IRRITATION.

INHALATION: VAPOURS MAY IRRITATE MUCOUS MEMBRANES AND RESPIRATORY TRACT. EXCESSIVE INHALATION MAY CAUSE DIZZINESS, NAUSEA, HEADACHE AND DROWSINESS, NASAL AND RESPIRATORY IRRITATION.

INGESTION: MAY CAUSE IRRITATION AND NAUSEA, VOMITING, DIZZINESS AND DIARRHEA. ASPIRATION OF MATERIAL INTO LUNGS DURING VOMITING CAN CAUSE CHEMICAL PNEUMONITIS, WHICH CAN BE FATAL.

ACUTE OVER-EXPOSURE

EFFECTS: AS ABOVE. PREVIOUSLY EXISTING SKIN AND/OR RESPIRATORY CONDITIONS MAY BE AGGRAVATED BY PRODUCT EXPOSURE..

CHRONIC OVER EXPOSURE

EFFECTS: NONE EXPECTED IN NORMAL USE. IN ANIMALS, ADVERSE OVER EXPOSURE EFFECTS TO THE DIETHYLENE GLYCOL ETHYL ETHER HAVE BEEN REPORTED ON THE FOLLOWING ORGANS : SPLEEN, SALIVARY GLANDS, LIVER, KIDNEY AND TESTES. ADVERSE BLOOD EFFECTS ALSO SEEN IN ANIMALS

SECTION 04: FIRST AID MEASURES

EYES: FLUSH EYES WITH ABUNDANT WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS OPEN TO ENSURE COMPLETE IRRIGATION OF THE ENTIRE EYE CAVITY. GET MEDICAL ATTENTION.

SKIN: WASH SKIN WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. IF SYMPTOMS PERSIST, GET MEDICAL ATTENTION.

INHALATION: IF SAFE TO ENTER VICTIMS AREA, REMOVE VICTIM TO FRESH AIR. ASSIST BREATHING AS NEEDED. GET MEDICAL ATTENTION.

INGESTION: **DO NOT INDUCE VOMITING.** IF VICTIM CONSCIOUS, GIVE 1 - 2 GLASSES OF WATER TO DILUTE STOMACH CONTENTS. **GET MEDICAL ATTENTION.** NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

NOTES TO PHYSICIAN: ALL TREATMENTS SHOULD BE BASED ON OBSERVED SIGNS/SYMPTOMS OF DISTRESS IN THE PATIENT. THE POSSIBILITY OF OVEREXPOSURE TO MATERIALS OTHER THAN THIS PRODUCT SHOULD BE CONSIDERED

SECTION 05: FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD OF

DETERMINATION: NONE. TCC

UPPER EXPLOSION LIMIT

(% BY VOLUME): NOT AVAILABLE

LOWER EXPLOSION LIMIT

(% BY VOLUME): NOT AVAILABLE

AUTO-IGNITION TEMPERATURE: NOT AVAILABLE

FLAMMABILITY CLASSIFICATION: NON-FLAMMABLE LIQUID

CONDITIONS OF FLAMMABILITY: NONE.

MEANS OF EXTINCTION: AS FOR SURROUNDING FIRE.

SPECIAL FIRE FIGHTING

PROCEDURES:

FIREFIGHTERS SHOULD WEAR FULL PROTECTIVE EQUIPMENT AND USE APPROVED SELF CONTAINED BREATHING APPARATUS. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS TO PREVENT PRESSURE BUILDUP AND POSSIBLE RUPTURE. DO NOT SPATTER OR SPLASH PRODUCT.

HAZARDOUS COMBUSTION

PRODUCTS:

OXIDES OF CARBON AND NITROGEN

EXPLOSION DATA:

NONE EXPECTED.

SENSITIVITY TO STATIC

DISCHARGE:

NOT SENSITIVE

SENSITIVITY TO MECHANIC

IMPACT :

NOT SENSITIVE

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SECTION 06: ACCIDENTAL RELEASE MEASURES

LEAK AND SPILL

PROCEDURES: CLEANUP PERSONNEL MUST USE FULL PROTECTIVE EQUIPMENT. REMOVE UNPROTECTED PERSONNEL AWAY FROM SPILL AREA. VENTILATE AREA. CAUTION: SPILL AREA MAY BE SLIPPERY.

SMALL SPILLS: MOP UP, AND FLUSH AREA WITH WATER.

LARGE SPILLS: DIKE SPILL. DO NOT ALLOW SPILL TO ENTER OPEN WATERWAYS OR SEWERS. RECLAIM ALL MATERIAL POSSIBLE. ABSORB REMAINDER WITH INERT MATERIAL AND PLACE IN SUITABLE CONTAINERS FOR DISPOSAL. FLUSH AREA WITH WATER.

SECTION 07: HANDLING AND STORAGE

HANDLING PROCEDURES

AND EQUIPMENT: AVOID CONTACT WITH EYES, SKIN OR CLOTHING. WASH SKIN THOROUGHLY AFTER HANDLING. DO NOT GENERATE OR BREATHE MISTS/ SPRAYS. REMOVE CONTAMINATED CLOTHING AND LAUNDRER BEFORE RE-USE. KEEP CONTAINER CLOSED WHEN NOT IN USE. READ AND FOLLOW LABEL INSTRUCTIONS. DO NOT CONTAMINATE FOOD, WATER OR FEED DURING USE OR STORAGE OF THIS PRODUCT. USE WITH VENTILATION.

STORAGE

REQUIREMENTS: KEEP CONTAINER CLOSED WHEN NOT IN USE. STORE IN A COOL WELL VENTILATED AREA AWAY FROM INCOMPATIBLE MATERIALS. KEEP FROM FREEZING. KEEP OUT OF REACH OF CHILDREN. DO NOT REUSE CONTAINER. STORE ONLY IN ORIGINAL CONTAINER.

SECTION 08: EXPOSURE CONTROLS/ PERSONAL PROTECTION

EYE PROTECTION: WEAR CHEMICAL SAFETY GOGGLES.

RESPIRATORY PROTECTION: NONE NORMALLY REQUIRED. USE NIOSH APPROVED RESPIRATOR IF EXPOSURE LIMITS ARE EXCEEDED OR IRRITATION OCCURS. USE RESPIRATOR IN ENCLOSED SPACE.

GLOVES: WEAR NITRILE OR NEOPRENE GLOVES.

OTHER PROTECTIVE

EQUIPMENT: AS NEEDED TO PREVENT ALL CONTACT WITH PRODUCT.

SPECIFIC ENGINEERING

CONTROLS: USE IN A WELL-VENTILATED AREA. USE GENERAL MECHANICAL AND / OR LOCAL EXHAUST IN CONFINED OR ENCLOSED AREA. .

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: LIQUID

ODOUR AND APPEARANCE: MILD ACRYLIC ODOUR, MILKY WHITE OPAQUE LIQUID.

ODOUR THRESHOLD: NOT AVAILABLE

SPECIFIC GRAVITY: 1.02-1.03

VAPOUR PRESSURE : AS WATER

VAPOUR DENSITY (AIR=1): AS WATER

VOC CONTENT (%): 4.7-5.8 (EPA METHOD 24)

EVAPORATION RATE; AS WATER

BOILING POINT; 100⁰ C (212 ⁰ F)

PH: 8-9

FREEZING POINT: NOT AVAILABLE

DENSITY (g/ ml): 1.02-1.03

COEFFICIENT OF WATER/OIL
DISTRIBUTION:. MISCIBLE IN WATER

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE UNDER NORMAL USE AND STORAGE

INCOMPATIBLE MATERIALS: AVOID ACIDS AND SALT SOLUTIONS

CONDITIONS OF REACTIVITY: NONE

HAZARDOUS DECOMPOSITION
PRODUCTS: OXIDES OF CARBON, NITROGEN AND OTHER TOXIC VAPOURS..

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SECTION 11: TOXICOLOGICAL INFORMATION

IRRITANCY OF PRODUCT: MODERATE IRRITANT
SENSITIZATION TO MATERIAL: ISODECYL BENZOATE COMPONENT IS NOT A SKIN SENSITIZER
CARCINOGENICITY,: NO KNOWN CARCINOGENS LISTED BY OSHA, IARC OR NTP.
REPRODUCTIVE EFFECTS: NO KNOWN REPRODUCTIVE EFFECTS.
TERATOGENICITY: DIETHYLENE GLYCOL ETHYL GLYCOL ANIMAL GENETIC TOXICITY STUDIES WERE NEGATIVE. NO TERATOGENIC EFFECTS ANTICIPATED FOR DIPROPYLENE GLYCOL METHYL ETHER COMPONENT. ISODECYL BENZOATE COMPONENT AT A DOSAGE RATE OF 1000 mg/ Kg/ Day, SHOWED ADVERSE MATERNAL AND TERATOGENIC EFFECTS .
MUTAGENICITY: DIPROPYLENE GLYCOL METHYL ETHER GAVE NEGATIVE RESULTS IN SHORT TERM TESTS ON BACTERIA AND CULTURED MAMMALIAN CELLS IN MUTAGENIC STUDIES. TRIBUTOXY PHOSPHATE COMPONENT WAS NOT MUTAGENIC IN AMES ASSAY. DIETHYLENE GLYCOL ETHYL ETHER IN VITRO MUTAGENICITY STUDIES WERE PREDOMINATELY NEGATIVE. ISODECYL BENZOATE COMPONENT WAS NOT MUTAGENIC IN BACTERIA, HUMAN CELLS AND ANIMALS.
TOXICOLOGICALLY SYNERGISTIC PRODUCTS: ETHYLENE GLYCOL INCREASED THE TOXICITY OF DIETHYLENE GLYCOL ETHYL ETHER IN AN ANIMAL STUDY.

SECTION 12: ECOLOGICAL INFORMATION

THERE IS NO ECOLOGICAL INFORMATION AVAILABLE FOR PRODUCT. ECOTOXICOLOGICAL INFORMATION TO FOLLOW IS BASED LARGELY OR COMPLETELY ON INFORMATION FOR COMPONENTS.

AQUATIC TOXICITY:
FISH SPECIES DATA: DIETHYLENE GLYCOL ETHYL ETHER LC50 ,96 HR, BLUEGILL: 10,000 mg/ L
DIETHYLENE GLYCOL ETHYL ETHER LC50 ,96 HR, BLUEGILL: 21,400 mg/ L
DIETHYLENE GLYCOL ETHYL ETHER LC50 ,96 HR, RAINBOW TROUT: 13420 mg/ L
DIETHYLENE GLYCOL ETHYL ETHER LC50 ,96 HR, FATHEAD MINNOW: 264000 mg/ L
DIETHYLENE GLYCOL ETHYL ETHER LC50 ,96 HR, FATHEAD MINNOW: >10000 mg/ L
DIETHYLENE GLYCOL ETHYL ETHER LC50 ,96 HR, FATHEAD MINNOW: 23200 mg/ L
DIETHYLENE GLYCOL ETHYL ETHER LC50 ,96 HR, STEELHEAD: 13400 mg/ L
DIPROPYLENE GLYCOL METHYL ETHER LC50 (96 HR), FATHEAD MINNOW: 10000 mg/L
TRI BUTOXYETHYL PHOSPHATE EC 50 ,96 HR,FATHEAD MINNOW: 16 mg/L
TRI BUTOXYETHYL PHOSPHATE EC 50 ,48 HR , KILLFISH @ 10 °C: 44 mg/L
TRI BUTOXYETHYL PHOSPHATE EC 50 ,48 HR , KILLFISH @ 20 °C: 27 mg/L
TRI BUTOXYETHYL PHOSPHATE EC 50 ,48 HR , KILLFISH @ 30 °C: 6.8 mg/L
ACRYLIC POLYMER LC 50, (96 HR), RAINBOW TROUT : >100 ppm
INVERTEBRATES: DIETHYLENE GLYCOL ETHYL ETHER LC50 ,48 HR, CLADOCERAN: 10,000-19800 mg/ L
DIETHYLENE GLYCOL ETHYL ETHER LC50 ,24 HR, BRINE SHRIMP: >10000 mg/ L
DIETHYLENE GLYCOL ETHYL ETHER LC50 ,48 HR, DAPHNIA MAGNA: 10,000-19800 mg/ L
DIPROPYLENE GLYCOL METHYL ETHER EC 50,48 HR, DAPHNIA: 5000 mg/ L
DIPROPYLENE GLYCOL METHYL ETHER EC 50,48 HR, DAPHNIA MAGNA : 1919 mg/ L
DIPROPYLENE GLYCOL METHYL ETHER EC 50,96 HR, BRINE SHRIMP : >1000 mg/ L
TRI BUTOXYETHYL PHOSPHATE LC 50 ,24 HR, DAPHNIA: 84 mg/ L
TRI BUTOXYETHYL PHOSPHATE LC 50 ,48 HR, DAPHNIA: 75 mg/L
ACRYLIC POLYMER EC 50, (48 HR), DAPHNIA MAGNA : >100 ppm
MICROORGANISMS: DIETHYLENE GLYCOL ETHYL ETHER BACTERIAL INHIBITION: IC50: >5000 mg/L
ACRYLIC POLYMER BACTERIAL INHIBITION, 15 MINUTES : IC50: >300 ppm
(GROWTH INHIBITION) PLANTS: ACRYLIC POLYMER EC 50, (72 HR), SELENASTRUM CAPRICORNUTUM : >100 ppm
DIPROPYLENE GLYCOL METHYL ETHER EC 50, SELENASTRUM CAPRICORNUTUM : >969 mg/ L
DIPROPYLENE GLYCOL METHYL ETHER IS PRACTICALLY NON-TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS: >100 mg/ L IN MOST SENSITIVE SPECIES. ACRYLIC POLYMER SOLUTION MAY BE HARMFUL TO AQUATIC ORGANISMS- MAY CAUSE LONG TERM EFFECTS IN AQUATIC ENVIRONMENT. ISODECYL BENZOATE COMPONENT HAS NO EFFECTS ON ALGAL GROWTH, LIFE CYCLE OF DAPHNIA, SURVIVAL OF RAINBOW TROUT OR EARLY LIFE STAGE DEVELOPMENT OF FLATHEAD MINNOW AT CONCENTRATIONS OF 50 µg / L, 39 µg / L, 6.5 mg/ L, AND 47 µg / L RESPECTIVELY. IT IS NOT INHIBITORY TO ACTIVATED SLUDGE BACTERIA.
BIODEGRADABILITY: DIETHYLENE GLYCOL ETHYL ETHER COMPONENT: BOD: 28 DAY: 90%(OECD 301E). DIETHYLENE GLYCOL ETHYL ETHER AND DIPROPYLENE GLYCOL METHYL ETHER COMPONENTS ARE READILY BIODEGRADABLE
DIPROPYLENE GLYCOL METHYL ETHER BOD (28): 72.9%. ACRYLIC POLYMER IS NOT READILY BIODEGRADABLE. ISODECYL BENZOATE COMPONENT HAS 67 % BIODEGRADATION AFTER 28 DAYS IN MODIFIED MITI TEST (OECD 301C); 20% BIODEGRADATION AFTER 28 DAYS IN CLOSED BOTTLE TEST. 100 % BIODEGRADATION BY HPLC IN 28 DAYS OECD 301C.
MOBILITY: DIETHYLENE GLYCOL ETHYL ETHER COMPONENT MOBILITY IN SOIL IS VERY HIGH.
PERSISTENCE: THE PHOSPHOROUS COMPONENT OF TRIBUTOXYETHYL PHOSPHATE COMPONENT WILL PERSIST INDEFINITELY
BIOACCUMULATIVE: DIETHYLENE GLYCOL ETHYL ETHER COMPONENT DOES NOT BIOACCUMULATE. DIPROPYLENE GLYCOL METHYL ETHER COMPONENT POTENTIAL IS LOW (BCF LESS THAN 100 OR LOG POW LESS THAN 3)
CHEMICAL FATE INFORMATION: NOT AVAILABLE

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SECTION 13: DISPOSAL CONSIDERATIONS

IN ACCORDANCE WITH MUNICIPAL, PROVINCIAL AND FEDERAL REGULATIONS.

SECTION 14: TRANSPORT INFORMATION

TDG: NOT REGULATED UNDER TDG

ADDITIONAL INFORMATION: NOT AVAILABLE
MARINE POLLUTANT: NO

SECTION 15: REGULATORY INFORMATION:

DSL STATUS: LISTED
HMIS CLASSIFICATION (H, F, R, PE): 1,0,0, B
WHMIS CLASSIFICATION: D2B

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR (CONTROLLED PRODUCTS REGULATIONS) AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

SECTION 16: OTHER INFORMATION

DISCLAIMER: THIS INFORMATION WAS COMPILED FROM CURRENT, RELIABLE SOURCES AND IS BELIEVED TO BE CORRECT. AS DATA AND/ OR REGULATIONS CHANGE, AND CONDITIONS OF USE ARE BEYOND OUR CONTROL, NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE AS TO COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.