MATERIAL SAFETY DATA SHEET

ENVIRO CHEM CONSEAL

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:	ENVIRO CHEM CONSEAL
PRODUCT USE:	CONCRETE/ STONE PROTECTIVE FINISH
WHMIS CATEGORY:	D2B
PREPARED BY:	ROCHESTER MIDLAND LIMITED.
PHONE NUMBER OF PREPARER:	(905) 847-3000
DATE PREPARED:	FEBRUARY 1, 2011

SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	%	CAS#	EXPOSURE LEVELS	LD (50), ROUTE, SPECIES	LC(50), ROUTE, SPECIES
DIETHYLENE GLYCOL BUTYL ETHER	3-7	112-34-5	NOT AVAILABLE	ORAL 4500-7300 mg /Kg (RAT) DERMAL 2700-4120 mg/ Kg (RABBIT)	NOT AVAILABLE
ETHYLENE GLYCOL	1-5	107-21-1	ACGIH TLV-CEILING 100 mg/ m^3 OSHA PEL-C 50 ppm	ORAL 4700 mg/ Kg (RAT) DERMAL 9530 mg/ Kg (RABBIT) SINGLE LETHAL ORAL DOSE (ADULT HUMAN) IS 1-1.2 ml/Kg OR APPROX. 100 ml.	10876 mg/m^3 4 HOUR EXPOSURE (RAT)
OTHER INGREDIENTS	**%**	**CAS#**	**EXPOSURE LEVELS**	**LD (50), ROUTE, SPECIES**	**LC(50), ROUTE, SPECIES**
TRIBUTOXYETHYL PHOSPHATE	1-5	78-51-3	NOT AVAILABLE	ORAL 3000 mg/ Kg (RAT) DERMAL >10000 mg/ Kg (RABBIT)	4.43 mg/ L 4 HOUR EXPOSURE (RAT)
ACRYLIC POLYMER	10-30	NOT AVAILABLE	NOT AVAILABLE	ORAL >5000 mg/ Kg (RAT) DERMAL >5000 mg/ Kg (RABBIT)	NOT AVAILABLE

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SECTION 03: HAZARDS IDENTIFICATION

POTENTIAL ACUTE HEALTH EFFECTS:

ROUTE OF ENTRY: EYES, SKIN, INHALATION, INGESTION

SKIN CONTACT: PROLONGED SKIN CONTACT MAY CAUSE IRRITATION.

SKIN ABSORPTION: GLYCOL ETHER COMPONENT CAN BE ABSORBED THROUGH THE SKIN WITH WIDESPREAD EXPOSURE CAUSING CENTRAL NERVOUS EFFECTS. ETHYLENE GLYCOL CAN BE ABSORBED THROUGH THE SKIN WITH WIDESPREAD EXPOSURE NOT EXPECTED WITH NORMAL USE.

EYE: MAY CAUSE IRRITATION.

INHALATION: VAPOURS MAY CAUSE DIZZINESS, NAUSEA, HEADACHE AND VOMITING, NASAL AND RESPIRATORY IRRITATION.

INGESTION: MAY CAUSE SEVERE IRRITATION AND NAUSEA, VOMITING, DIZZINESS AND DIARRHEA. INGESTION OF LARGE AMOUNTS MAY BE HARMFUL. ASPIRATION OF MATERIAL INTO LUNGS DURING VOMITING CAN CAUSE CHEMICAL PNEUMONITIS.

ACUTE OVER-EXPOSURE EFFECTS: AS ABOVE. PREVIOUSLY EXISTING SKIN AND/OR RESPIRATORY CONDITIONS MAY BE AGGRAVATED BY PRODUCT EXPOSURE. ETHYLENE GLYCOL COMPONENT CAN CAUSE LIVER, KIDNEY AND BRAIN DAMAGE WITH INGESTION OF LETHAL / NEAR LETHAL AMOUNTS. ADVERSE OVEREXPOSURE TO GLYCOL ETHER COMPONENT CAN CAUSE SEVERE KIDNEY EFFECTS, RED BLOOD HEMOLYSIS, LIVER DAMAGE AND CNS DEPRESSION.

CHRONIC OVER EXPOSURE EFFECTS: LONG TERM OVER EXPOSURE TO THE GLYCOL ETHER COMPONENT THROUGH INGESTION OR SKIN ABSORPTION MAY CAUSE LIVER, KIDNEY, SPLEEN AND BLOOD EFFECTS. NOT A LIKELY OCCURRENCE UNDER NORMAL USE. ADVERSE OVEREXPOSURE TO ETHYLENE GLYCOL COMPONENT MAY CAUSE ADVERSE KIDNEY AND LIVER EFFECTS

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 ABUNDANT WATER FOR AT LEAST 15 MINUTES. 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. IF SYMPTOMS PERSIST, 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. DIKE TO CONTAIN WATER USED IN FIGHTING FIRE. DO NOT ALLOW THIS WATER INTO OPEN WATERWAYS OR SEWERS.
HAZARDOUS COMBUSTION PRODUCTS:	OXIDES OF CARBON, NITROGEN AND AMMONIA.
EXPLOSION DATA:	NOT APPLICABLE.
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: EXTINGUISH ALL IGNITION SOURCES. 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 BREATHE MISTS/ SPRAYS. REMOVE CONTAMINATED CLOTHING AND LAUNDER 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.

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

GENERAL ADVICE: THESE RECOMMENDATIONS PROVIDE GENERAL GUIDANCE FOR HANDLING THIS PRODUCT. PERSONAL PROTECTIVE EQUIPMENT SHOULD BE SELECTED FOR INDIVIDUAL APPLICATIONS AND SHOULD CONSIDER FACTORS WHICH AFFECT EXPOSURE POTENTIAL, SUCH AS HANDLING PRACTICES, CHEMICAL CONCENTRATIONS AND VENTILATION. IT IS ULTIMATELY THE RESPONSIBILITY OF THE EMPLOYER TO FOLLOW REGULATORY GUIDELINES ESTABLISHED BY LOCAL AUTHORITIES

EYE PROTECTION: WEAR CHEMICAL SPLASH GOGGLES.

RESPIRATORY PROTECTION: USE WITH ADEQUATE VENTILATION. USE NIOSH APPROVED RESPIRATOR IF EXPOSURE LIMITS ARE EXCEEDED OR IRRITATION OCCURS. USE RESPIRATOR IN ENCLOSED SPACE.

GLOVES: WEAR BUTYL RUBBER GLOVES.

OTHER PROTECTIVE EQUIPMENT: AS NEEDED TO PREVENT ALL CONTACT WITH PRODUCT.

SPECIFIC ENGINEERING CONTROLS: USE GENERAL MECHANICAL AND / OR LOCAL EXHAUST. USE WITH ADEQUATE VENTILATION.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	LIQUID
ODOUR AND APPEARANCE:	CHARACTERISTIC POLYMER ODOUR; MILKY WHITE LIQUID
ODOUR THRESHOLD:	NOT AVAILABLE
SPECIFIC GRAVITY:	1.015-1.025
VAPOUR PRESSURE :	AS WATER
VAPOUR DENSITY (AIR=1):	AS WATER
VOC CONTENT (%):	6.46-6.96 (EPA METHOD 24)
EVAPORATION RATE;	1 (BuAc= 1)
BOILING POINT;	100^0 C (212 ^{0} F)
PH:	7-8
FREEZING POINT:	NOT AVAILABLE
DENSITY (g/ ml):	1.015-1.025
COEFFICIENT OF WATER/OIL DISTRIBUTION:.	COMPLETELY WATER SOLUBLE

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:	STABLE UNDER NORMAL USE AND STORAGE.
INCOMPATIBLE MATERIALS:	AVOID ACIDS AND SALT SOLUTIONS.
CONDITIONS OF REACTIVITY:	NONE EXPECTED UNDER NORMAL USE.
HAZARDOUS DECOMPOSITION PRODUCTS:	OXIDES OF CARBON, NITROGEN, AMMONIA AND OTHER TOXIC FUMES.

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SECTION 11: TOXICOLOGICAL INFORMATION

IRRITANCY OF PRODUCT: MILD IRRITANT

SENSITIZATION TO MATERIAL: ETHYLENE GLYCOL COMPONENT CAN CAUSE DERMATITIS IN SENSITIVE INDIVIDUALS (LESS THAN 1% USING UNDILUTED ETHYLENE GLYCOL)

CARCINOGENICITY: NO KNOWN CARCINOGENS LISTED BY OSHA, IARC OR NTP.

REPRODUCTIVE EFFECTS: NO ADVERSE REPRODUCTIVE EFFECTS ANTICIPATED FOR GLYCOL ETHER COMPONENT. INGESTION OF LARGE AMOUNTS OF ETHYLENE GLYCOL HAS BEEN SHOWN TO INTERFERE WITH REPRODUCTION IN ANIMALS, SPECIFICALLY GROWTH RETARDATION, DECREASED LITTER SIZES IN RATS AND MICE AND DECREASE MATING FREQUENCY IN MICE. NO HUMAN DATA AVAILABLE.

TERATOGENICITY: TRIBUTOXYETHYL PHOSPHATE COMPONENT IS NOT EXPECTED TO BE TERATOGENIC. ETHYLENE GLYCOL COMPONENT HAS SHOWN EMBRYOTOXIC AND TERATOGENIC EFFECTS IN RATS AND MICE AT DOSES THAT WERE NOT MATERNALLY TOXIC. NOT EXPECTED IN HUMANS WITH OCCUPATIONAL EXPOSURE SINCE ORAL CONSUMPTION IS NOT A LIKELY ROUTE OF SIGNIFICANT EXPOSURE . NO ADVERSE TERATOGENIC EFFECTS ANTICIPATED FOR GLYCOL ETHER COMPONENT.

MUTAGENICITY: TESTS ON GLYCOL ETHER COMPONENT USING BACTERIA AND CULTURED MAMMALIAN CELLS HAVE BEEN NEGATIVE FOR MUTAGENIC EFFECTS. NO HUMAN INFORMATION IS AVAILABLE. TRIBUTOXYETHYL PHOSPHATE COMPONENT WAS NOT MUTAGENIC IN AMES ASSAY AND BY MOUSE LYMPHOMA ASSAY. ETHYLENE GLYCOL COMPONENT IN VITRO AND ANIMAL MUTAGENCITY STUDIES WERE NEGATIVE.

TOXICOLOGICALLY SYNERGISTIC PRODUCTS: ETHYLENE GLYCOL INCREASED THE TOXICITY OF DIETHYLENE GLYCOL ETHYL ETHER IN AN ANIMAL STUDY. ETHYLENE GLYCOL MAY INCREASE THE TOXICITY OF SOME CHLORINATED SOLVENTS, DITHIOCARBAMATES, DINITROSAMINES AND THIOACETAMIDE. GLYCOL ETHER COMPONENT MAY ENHANCE THE TOXICITY OF SOME CHLORINATED HYDROCARBONS, DITHIOCARBAMATES OR DIMETHYL NITROSAMINES

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:
ETHYLENE GLYCOL LC50, 96 HR, BLUEGILL: 27500 mg/L
ETHYLENE GLYCOL LC50, BLUEGILL: 27549 mg/L
ETHYLENE GLYCOL LC50, 96 HR, GOLDFISH:>5000 mg/L
ETHYLENE GLYCOL LC50, FATHEAD MINNOW: 51,000 mg/L
ETHYLENE GLYCOL LC50, FATHEAD MINNOW: 49000 mg/L
ETHYLENE GLYCOL LC50, 96 HR, FATHEAD MINNOW: 8050 mg/L
ETHYLENE GLYCOL LC50, RAINBOW TROUT: 18,000-46,000 mg/L
ETHYLENE GLYCOL LC50, RAINBOW TROUT: 41,000 mg/L
ETHYLENE GLYCOL LC50, RAINBOW TROUT: 40,761 mg/L
ETHYLENE GLYCOL LC50, GUPPY: 49,000 mg/L
ETHYLENE GLYCOL LC50, GUPPY: 16,000 mg/L
GLYCOL ETHER LC50, 96 HR, BLUEGILL SUNFISH: 1300 mg/ L
GLYCOL ETHER LC50, 48 HR, GOLDEN ORFE: 2250 mg/ L
GLYCOL ETHER LC 50, 24 HR, GOLDFISH: 2700 mg/ L
TRI BUTOXYETHYL PHOSPHATE LC 50 ,96 HR, FATHEAD MINNOW: 11.2 mg/L
TRI BUTOXYETHYL PHOSPHATE LC 50 ,96 HR , RAINBOW TROUT: 24 mg/L

INVERTEBRATES:
TRI BUTOXYETHYL PHOSPHATE LC 50 ,48 HR, DAPHNIA: 75 mg/L
GLYCOL ETHER LC 50, 24 HR, DAPHNIA MAGNA: 2850 mg/L
GLYCOL ETHER LC 50, 48 HR, DAPHNIA MAGNA: >100 mg/L
ETHYLENE GLYCOL LC50, 48 HR, DAPHNIA MAGNA:>10, 000 mg/L
ETHYLENE GLYCOL LC50, 48 HR, DAPHNIA MAGNA: 46300 mg/L
ETHYLENE GLYCOL LC50, 48 HR, BRINE SHRIMP: 20, 000 mg/L
MICROORGANISMS: NOT AVAILABLE

(GROWTH INHIBITION) PLANTS:
GLYCOL ETHER EC 50, SCENEDESMUS SUBSPICATUS: 100 mg/ L
ETHYLENE GLYCOL EC 50, SELENASTRUM CAPRICORNUTUM : 1300-6500 mg/ L

GLYCOL ETHER AND ETHYLENE GLYCOL COMPONENTS ARE PRACTICALLY NON-TOXIC TO AQUATIC ORGANISMS.

BIODEGRADABILITY: TRI BUTOXYETHYL PHOSPHATE IS READILY BIODEGRADABLE. GLYCOL ETHER COMPONENT IS READILY BIODEGRADABLE. GLYCOL ETHER COMPONENT: BOD-5 DAYS 22-27%, 10 DAYS 60-80%, 20 DAYS 77-85%. WHEN RELEASED INTO THE SOIL, ETHYLENE GLYCOL COMPONENT IS EXPECTED TO READILY BIODEGRADE. WHEN RELEASED INTO WATER, ETHYLENE GLYCOL COMPONENT IS EXPECTED TO READILY BIODEGRADE. ETHYLENE GLYCOL BOD 20 DAYS: 81-94%

MOBILITY: ETHYLENE GLYCOL COMPONENT MAY LEACH INTO GROUNDWATER AND POTENTIAL FOR MOBILITY IN SOIL IS HIGH.

PERSISTENCE: THE PHOSPHOROUS COMPONENT OF TRIBUTOXYETHYL PHOSPHATE COMPONENT WILL PERSIST INDEFINITELY

BIOACCUMULATIVE: GLYCOL ETHER COMPONENT DOES NOT BIOACCUMULATE. ETHYLENE GLYCOL COMPONENT IS NOT EXPECTED TO SIGNIFICANTLY BIOACCUMULATE.

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SECTION 12: ECOLOGICAL INFORMATION (CONT'D)

CHEMICAL FATE INFORMATION: WHEN RELEASED INTO THE AIR, ETHYLENE GLYCOL COMPONENT IS EXPECTED TO BE READILY DEGRADED BY REACTION WITH PHOTOCHEMICALLY PRODUCED HYDROXYL RADICALS. WHEN RELEASED INTO THE AIR, ETHYLENE GLYCOL COMPONENT IS EXPECTED TO HAVE A HALF-LIFE BETWEEN 1 AND 10 DAYS. GLYCOL ETHER COMPONENT CAN PHOTODEGRADE IN THE AIR. ESTIMATED HALF LIFE IS EXPECTED TO BE 10 HOURS WHEN RELEASED INTO THE AIR.

OTHER INFORMATION: NOT AVAILABLE

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.