



MATERIAL SAFETY DATA SHEET

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURED FOR: INO SOLUTIONS
 9280 BOUL DU GOLF, ANJOU, MONTREAL, P.Q. H1J 3A1
 EMERGENCY PHONE NUMBER: CANUTEC (613) 996-6666
 PRODUCT NAME : INO GLOSS 5
 PRODUCT USE : ULTRA HIGH SPEED FLOOR FINISH
 WHMIS CATEGORY: D2B
 PREPARED BY : REGULATORY DEPARTMENT
 PHONE NUMBER OF PREPARER: (905) 847-3000 EXT 250
 DATE PREPARED: MARCH 9, 2016



SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	%	CAS#	EXPOSURE LEVELS	LD (50), ROUTE, SPECIES	LC(50), ROUTE, SPECIES
DIETHYLENE GLYCOL ETHYL ETHER (GLYCOL ETHER DE)	1-5	111-90-0	MANUFACTURER TWA 25 ppm CAD ON OEL TWA 30 ppm 165 mg/ m ³	ORAL 1920-9050 mg/ Kg (RAT) DERMAL 4150 mg/ 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 5135-5660 mg/ Kg (RAT) DERMAL 9510 mg/ Kg (RABBIT)	>661 ppm 4 HOUR EXPOSURE (RAT) 3.35 mg/ L 3350 mg/ m ³ 7 HOUR EXPOSURE NO DEATHS (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)	4.43 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)	2.2-4.9 mg/ L 4 HOUR EXPOSURE (RAT)

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: A SINGLE PROLONGED SKIN EXPOSURE TO GLYCOL ETHER DE COMPONENT IS NOT LIKELY TO RESULT IN ABSORPTION OF TOXIC AMOUNTS OF MATERIAL. EXTENSIVE AND WIDESPREAD CONTACT WITH CONCENTRATED PRODUCT MAY CAUSE SKIN ABSORPTION OF HARMFUL AMOUNTS OF DIPROPYLENE GLYCOL METHYL ETHER COMPONENT. NOT EXPECTED WHEN USED AS DIRECTED.

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.

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 WHEN USED AS DIRECTED.

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. DIKE TO CONTAIN WATER USED IN FIGHTING FIRE. DO NOT ALLOW THIS WATER INTO OPEN WATERWAYS OR SEWERS

HAZARDOUS COMBUSTION

PRODUCTS:

OXIDES OF CARBON AND NITROGEN

EXPLOSION DATA:

NONE EXPECTED.

SENSITIVITY TO STATIC

DISCHARGE:

NOT SENSITIVE

SENSITIVITY TO MECHANIC

IMPACT :

NOT SENSITIVE

INO GLOSS 5

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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 INDOORS 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 (212⁰ 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 WHEN USED AND STORED AS DIRECTED.

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. DIPROPYLENE GLYCOL METHYL ETHER COMPONENT DID NOT CAUSE ALLERGIC SKIN REACTIONS WHEN TESTED ON HUMANS
 CARCINOGENICITY: NO KNOWN CARCINOGENS LISTED BY OSHA, IARC OR NTP.
 REPRODUCTIVE EFFECTS: NO KNOWN REPRODUCTIVE EFFECTS.
 TERATOGENICITY: GLYCOL ETHER DE ANIMAL GENETIC TOXICITY STUDIES WERE NEGATIVE. NO TERATOGENIC EFFECTS ANTICIPATED FOR TRIBUTOXYETHYL PHOSPHATE COMPONENT. DIPROPYLENE GLYCOL METHYL ETHER COMPONENT SHOWED NO BIRTH DEFECTS OR OTHER FETAL DEFECTS IN LABORATORY ANIMALS
 MUTAGENICITY: DIPROPYLENE GLYCOL METHYL ETHER COMPONENT IN VITRO GENETIC TOXICITY STUDIES WERE NEGATIVE. TRIBUTOXY PHOSPHATE COMPONENT WAS NOT MUTAGENIC IN AMES ASSAY AND BY MOUSE LYMPHOMA ASSAY. GLYCOL ETHER DE IN VITRO MUTAGENICITY STUDIES WERE PREDOMINATELY NEGATIVE.
 TOXICOLOGICALLY SYNERGISTIC PRODUCTS: ETHYLENE GLYCOL INCREASED THE TOXICITY OF GLYCOL ETHER DE IN AN ANIMAL STUDY.
 OTHER INFORMATION: IN ANIMAL TESTS, SEVERAL ORAL STUDIES OF GLYCOL ETHER DE COMPONENT SHOWED ADVERSE EFFECTS TO KIDNEYS AND TO A LESSER EFFECT, LIVERS OF A NUMBER OF SPECIES. NO CLEAR OR CONSISTENT EVIDENCE ON THE TESTES. BLOOD OR BLOOD FORMING SYSTEMS.

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: GLYCOL ETHER DE LC50, 96 HR, BLUEGILL: 19,100-23,900 mg/ L FLO THRU
 GLYCOL ETHER DE LC50, 96 HR, BLUEGILL: 10,000 mg/ L STATIC
 GLYCOL ETHER DE LC50, 96 HR, BLUEGILL: 21,400 mg/ L
 GLYCOL ETHER DE LC50, 96 HR, RAINBOW TROUT: 13420 mg/ L
 GLYCOL ETHER DE LC50, 96 HR, FATHEAD MINNOW: 11,600-16700 mg/ L FLO THRU
 GLYCOL ETHER DE LC50, 96 HR, STEELHEAD: 13400 mg/ L FLO THRU
 DIPROPYLENE GLYCOL METHYL ETHER LC50, 96 HR, FATHEAD MINNOW:> 10000 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
 ISODECYL BENZOATE LC 50, 96 HR, RAINBOW TROUT: 6.5 mg/L
 INVERTEBRATES: GLYCOL ETHER DE LC50, 48 HR, DAPHNIA MAGNA: 3940-4670 mg/ L
 DIPROPYLENE GLYCOL METHYL ETHER EC 50,48 HR: DAPHNIA MAGNA: >5000 mg/ L
 DIPROPYLENE GLYCOL METHYL ETHER EC 50,48 HR, DAPHNIA MAGNA: >5000 mg/ L
 DIPROPYLENE GLYCOL METHYL ETHER LC 50,48 HR, DAPHNIA MAGNA: 1919 mg/ L
 DIPROPYLENE GLYCOL METHYL ETHER LC 50 96 HR, BRINE SHRIMP :>1000 mg/ L
 DIPROPYLENE GLYCOL METHYL ETHER LOEC 50, 22 DAYS REPRODUCTIVE, DAPHNIA MAGNA: >0.5 mg/L FLOW THRO'
 DIPROPYLENE GLYCOL METHYL ETHER NOEC 50, 22 DAYS REPRODUCTIVE, DAPHNIA MAGNA:>0.5 mg/L FLOW THRO'
 ISODECYL BENZOATE EC 50, 48 HR, WATER FLEA: 0.54 mg/L
 TRI BUTOXYETHYL PHOSPHATE LC 50, 48 HR, DAPHNIA: 75 mg/L
 MICROORGANISMS: GLYCOL ETHER DE EC10, UNSPECIFIED BACTERIA: 4000 mg/L
 (GROWTH INHIBITION) PLANTS: DIPROPYLENE GLYCOL METHYL ETHER EC 50, SELENASTRUM CAPRICORNUTUM : >969 mg/ L
 DIPROPYLENE GLYCOL METHYL ETHER AND GLYCOL ETHER DE COMPONENTS ARE PRACTICALLY NON-TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS: >100 mg/ L IN MOST SENSITIVE SPECIES.
 BIODEGRADABILITY: GLYCOL ETHER DE COMPONENT: BOD: 28 DAY: 90%(OECD 301E). GLYCOL ETHER DE, TRIBUTOXYETHYL PHOSPHATE AND DIPROPYLENE GLYCOL METHYL ETHER COMPONENTS ARE READILY BIODEGRADABLE
 DIPROPYLENE GLYCOL METHYL ETHER BOD 28 DAYS: 75%. ISODECYL BENZOATE COMPONENT IS NOT BIODEGRADABLE. BOD 28 DAYS- 20%
 MOBILITY: GLYCOL ETHER DE COMPONENT MOBILITY IN SOIL IS VERY HIGH. DIPROPYLENE GLYCOL METHYL ETHER COMPONENT POTENTIAL FOR MOBILITY IS HIGH. IT MAY ENTER SOIL AND CONTAMINATE GROUNDWATER.
 PERSISTENCE: THE PHOSPHOROUS COMPONENT OF TRIBUTOXYETHYL PHOSPHATE COMPONENT WILL PERSIST INDEFINITELY
 BIOACCUMULATIVE: GLYCOL ETHER DE 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
 OTHER 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.