



MATERIAL SAFETY DATA SHEET

TUFF-COTE

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURED FOR: THE CLEANING HOUSE
ADDRESS: 973 BARTON ST. E., HAMILTON, ONTARIO L8L 3C4
EMERGENCY PHONE NUMBER: 905-547-2636
PRODUCT NAME: TUFF-COTE
PRODUCT USE : FLOOR FINISH
WHMIS CATEGORY: D2B
PREPARED BY: REGULATORY DEPARTMENT
PHONE NUMBER OF PREPARER: (905) 847-3000 EXT 250
DATE PREPARED: JUNE 1, 2012



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	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)
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)

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 COMPONENT IS NOT LIKELY TO RESULT IN ABSORPTION OF TOXIC AMOUNTS OF MATERIAL.

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 IN NORMAL USE.

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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 TO BOILING; 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 PHOSPHOROUS.

EXPLOSION DATA: NONE EXPECTED.

SENSITIVITY TO STATIC DISCHARGE: NOT SENSITIVE

SENSITIVITY TO MECHANICAL IMPACT : NOT SENSITIVE

SECTION 06: ACCIDENTAL RELEASE MEASURES

LEAK AND SPILL PROCEDURES: CLEANUP PERSONNEL MUST USE FULL PROTECTIVE EQUIPMENT AS OUTLINED IN PERSONAL PROTECTION SECTION. 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 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 INDOORS IN A COOL WELL VENTILATED AREA AWAY FROM INCOMPATIBLE MATERIALS. DO NOT STORE AT TEMPERATURES GREATER THAN 37.8 °C (100 °F) FOR EXTENDED PERIODS OF TIME. DO NOT FREEZE. KEEP OUT OF REACH OF CHILDREN. DO NOT REUSE CONTAINER. STORE ONLY IN ORIGINAL CONTAINER.

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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.
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: 1.015-1.035
VAPOUR PRESSURE: NOT AVAILABLE
VAPOUR DENSITY (AIR=1): NOT AVAILABLE
VOC CONTENT (%): <0.10 (ARB 310)
EVAPORATION RATE: AS WATER
BOILING POINT: NOT AVAILABLE
PH: 8.3-8.6
FREEZING POINT: DO NOT FREEZE
DENSITY (g/ml): 1.015-1.035
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 PHOSPHOROUS.

SECTION 11: TOXICOLOGICAL INFORMATION

IRRITANCY OF PRODUCT: MODERATE EYE IRRITANT; MILD SKIN IRRITANT
SENSITIZATION TO MATERIAL: NOT AVAILABLE
CARCINOGENICITY: NO KNOWN CARCINOGENS LISTED BY OSHA, IARC OR NTP.
REPRODUCTIVE EFFECTS: NO KNOWN REPRODUCTIVE EFFECTS.
TERATOGENICITY: TRIBUTOXETHYL PHOSPHATE COMPONENT IS NOT EXPECTED TO BE TERATOGENIC. DIETHYLENE GLYCOL ETHYL ETHER ANIMAL GENETIC TOXICITY STUDIES WERE NEGATIVE.
MUTAGENICITY: TRIBUTOXETHYL PHOSPHATE COMPONENT WAS NOT MUTAGENIC IN AMES ASSAY AND BY MOUSE LYMPHOMA ASSAY. DIETHYLENE GLYCOL ETHYL ETHER IN VITRO MUTAGENICITY STUDIES WERE PREDOMINATELY NEGATIVE.
TOXICOLOGICALLY SYNERGISTIC PRODUCTS: ETHYLENE GLYCOL INCREASED THE TOXICITY OF DIETHYLENE GLYCOL ETHYL ETHER IN AN ANIMAL STUDY.
OTHER INFORMATION: IN ANIMAL TESTS, SEVERAL ORAL STUDIES OF GLYCOL ETHER 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.

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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: 19,100-23,900 mg/ L FLO THRU
DIETHYLENE GLYCOL ETHYL ETHER LC50, 96 HR, BLUEGILL: 10,000 mg/ L STATIC
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: 11,600-16700 mg/ L FLO THRU
DIETHYLENE GLYCOL ETHYL ETHER LC50, 96 HR, STEELHEAD: 13400 mg/ L FLO THRU
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
DIETHYLENE GLYCOL ETHYL ETHER LC50, 48 HR, DAPHNIA MAGNA: 3940-4670 mg/ L
TRI BUTOXYETHYL PHOSPHATE LC 50, 48 HR, DAPHNIA: 75 mg/L

INVERTEBRATES:

MICROORGANISMS:

(GROWTH INHIBITION) PLANTS: NOT AVAILABLE

DIETHYLENE GLYCOL ETHYL ETHER EC10, UNSPECIFIED BACTERIA: 4000 mg/L

DIETHYLENE GLYCOL ETHYL ETHER IS PRACTICALLY NON-TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS: >100 mg/ L IN MOST SENSITIVE SPECIES.

BIODEGRADABILITY:

ENVIRO CHEM NOVUS IS BIODEGRADABLE AS PER 40 CFR796.3200 EPA/TSCA

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

CHEMICAL FATE

INFORMATION:

NOT AVAILABLE

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:

ONE COMPONENT IS PENDING FOR ADDITION TO DSL. ANNUAL QUANTITY IS BEING TRACKED. ALL OTHER COMPONENTS ARE 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.

PRODUCT CONTAINS 0.23% PHOSPHOROUS AS P.

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.