

BEBBINGTON INDUSTRIES SAFETY DATA SHEET

TOLUENE / TOLUOL

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

SUPPLIER	BEBBINGTON INDUSTRIES 44 WRIGHT AVENUE DARTMOUTH, NOVA SCOTIA, CANADA B3B 1G6
PRODUCT NAME	TOLUENE / TOLUOL
CHEMICAL FORMULA	C7H8
CHEMICAL FAMILY	AROMATIC HYDROCARBON
MATERIAL USE	SOLVENT
EMERGENCY NUMBER	CANUTEC 1 613 996 6666

SECTION 02: HAZARDS IDENTIFICATION



HAZARD CLASSIFICATION.....	FLAMMABLE LIQUIDS — CATEGORY 2. SKIN IRRITATION — CATEGORY 2. SPECIFIC TARGET ORGAN TOXICITY — SINGLE EXPOSURE — CATEGORY 3. SPECIFIC TARGET ORGAN TOXICITY — REPEATED EXPOSURE — CATEGORY 2. ASPIRATION HAZARD — CATEGORY 1.
SIGNAL WORD.....	DANGER.
HAZARD STATEMENT.....	H225 HIGHLY FLAMMABLE LIQUID AND VAPOUR. H304 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. H315 CAUSES SKIN IRRITATION. H336 MAY CAUSE DROWSINESS OR DIZZINESS. H373 MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.
PRECAUTIONARY STATEMENT.....	P210 KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES AND OTHER IGNITION SOURCES – NO SMOKING... P233 KEEP CONTAINER TIGHTLY CLOSED. P241 USE EXPLOSION-PROOF ELECTRICAL/VENTILATING/LIGHTING/.../ EQUIPMENT. P242 USE ONLY NON-SPARKING TOOLS. P243 TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE. P260 DO NOT BREATHE DUST/FUME/GAS/MIST/VAPOURS/SPRAY. P271 USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA. P273 AVOID RELEASE TO THE ENVIRONMENT. P264 WASH... THOROUGHLY AFTER HANDLING. P280 WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION. P301+P310 IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. P302+P352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER. P303+P361+P353 IF ON SKIN (OR HAIR): REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER. P304+P340 IF INHALED: REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. P312 CALL A POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL. P331 DO NOT INDUCE VOMITING. P332+P313 IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/ATTENTION. P362+P364 TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE REUSE. P370+P378 IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR ALCOHOL RESISTANT FOAM FOR EXTINCTION. P403+P233 STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER TIGHTLY CLOSED. P405 STORE LOCKED UP. P501 DISPOSE OF CONTENTS/CONTAINER ACCORDING TO ALL APPLICABLE REGULATIONS.
OTHER HAZARDS.....	TOXIC TO AQUATIC LIFE. VAPOURS CAN ACCUMULATE IN LOW AREAS.

SECTION 03: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	CAS #	WT. %
TOLUENE	108-88-3	<= 100

PRODUCT: TOLUENE/TOLUOL**SECTION 04: FIRST AID MEASURES**

GENERAL ADVICE:.....	CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE. MOVE OUT OF DANGEROUS AREA.
IF INHALED:.....	IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION AND GET MEDICAL ATTENTION.
IN CASE OF SKIN CONTACT:.....	WASH OFF WITH SOAP AND PLENTY OF WATER. CONSULT A PHYSICIAN.
IN CASE OF EYE CONTACT:.....	WASH EYES WITH COPIOUS AMOUNT OF WATER.
IF SWALLOWED:.....	DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN. DO NOT LEAVE VICTIM UNATTENDED.

SECTION 05: FIRE FIGHTING MEASURES

FLAMMABILITY.....	FLAMMABLE IN THE PRESENCE OF A SOURCE OF IGNITION WHEN THE TEMPERATURE IS ABOVE THE FLASH POINT. KEEP AWAY FROM HEAT/SPARK/OPEN FLAME/HOT SURFACE. NO SMOKING.
SUITABLE EXTINGUISHING MEDIA.....	SUITABLE FOR SURROUNDING FIRE. USE MEDIA SUITABLE FOR SURROUNDING FIRE, SUCH AS WATER SPRAY, DRY CHEMICAL, FOAM.
HAZARDOUS COMBUSTION PRODUCTS. SPECIFIC HAZARDS ARISING FROM THE CHEMICAL	CARBON OXIDES. NO DATA AVAILABLE.
SPECIAL PROCEDURES.....	EVACUATE HAZARD AREA. WEAR FULL PROTECTIVE EQUIPMENT INCLUDING A SELF-CONTAINED BREATHING APPARATUS. USE WATER TO COOL CONTAINERS.

SECTION 06: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:.....	USE PERSONAL PROTECTIVE EQUIPMENT. AVOID BREATHING VAPORS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. REMOVE ALL SOURCES OF IGNITION. EVACUATE PERSONNEL TO SAFE AREAS. BEWARE OF VAPOURS ACCUMULATING TO FORM EXPLOSIVE CONCENTRATIONS. VAPOURS CAN ACCUMULATE IN LOW AREAS.
ENVIRONMENTAL PRECAUTIONS:.....	PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP:	CONTAIN SPILLAGE AND THEN COLLECT WITH ELECTRICALLY PROTECTED VACUUM CLEANER OR BY WET-BRUSHING AND PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO LOCAL REGULATIONS.

SECTION 07: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING.....	HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. AVOID BREATHING MIST OR VAPOUR. WEAR PROTECTIVE EQUIPMENT DURING HANDLING. USE ADEQUATE VENTILATION. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME. TAKE MEASURES TO PREVENT THE BUILD UP OF ELECTROSTATIC CHARGE.
CONDITIONS FOR SAFE STORAGE.....	KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAMES. PROTECT CONTAINER FROM PHYSICAL DAMAGE. KEEP THE CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. STORE AWAY FROM INCOMPATIBLE MATERIALS. STORE IN A COOL AND WELL-VENTILATED AREA. KEEP AWAY FROM FLAMES AND SPARKS. STORE AWAY FROM STRONG OXIDIZERS.

SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL	NIOSH
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TOLUENE 20 PPM

ENGINEERING CONTROLS.....	USE GOOD VENTILATION. LOCAL EXHAUST SUGGESTED FOR ENCLOSED SPACES.
SKIN AND BODY PROTECTION.....	COMPLETE SUIT PROTECTING AGAINST CHEMICALS. THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE. FLAME RETARDANT ANTISTATIC PROTECTIVE CLOTHING.
RESPIRATORY PROTECTION.....	USE NIOSH APPROVED SUPPLIED-AIR RESPIRATOR.
EYE/FACE PROTECTION.....	SPLASH PROOF CHEMICAL GOGGLES. FACE SHIELD.
HYGIENIC MEASURES.....	USE GOOD PERSONAL HYGIENE PRACTICES. WASH HANDS BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. PROMPTLY REMOVE SOILED CLOTHING AND WASH THOROUGHLY BEFORE REUSE. SHOWER AFTER WORK USING PLENTY OF SOAP AND WATER.

PRODUCT: TOLUENE/TOLUOL

SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

OTHER/TYPE..... EYE WASH STATION AND SAFETY SHOWER SHOULD BE LOCATED NEAR THE WORK STATION.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... COLOURLESS LIQUID.
 ODOUR..... AROMATIC.
 ODOUR THRESHOLD..... 1.74 PPM.
 PH..... NO DATA AVAILABLE.
 MELTING POINT/FREEZING POINT (C)..... -95C/-139F TOLUENE.
 BOILING POINT..... 110-111 C.
 FLASH POINT (C), METHOD..... 4 C (CLOSED CUP).
 EVAPORATION RATE..... 6.1 (DIN 53170, DI-ETHYL ETHER=1); 2 (ASTM D 3539, nBUAC=1).
 FLAMMABILITY (SOLIDS AND GASES)..... FLAMMABLE GASES.
 UPPER FLAMMABLE LIMIT (% BY VOL.)... 7% (V) TOLUENE.
 LOWER FLAMMABLE LIMIT (% BY VOL.)... 1.2% (V) TOLUENE.
 VAPOUR PRESSURE..... 29.1 hPa AT 20 C (TOLUENE).
 VAPOUR DENSITY (AIR=1)..... 3.2.
 SPECIFIC GRAVITY (WATER=1)..... 0.87.
 SOLUBILITY IN WATER (% W/W)..... NEGLIGIBLE.
 AUTO IGNITION TEMPERATURE..... 535 C (TOLUENE).
 PARTITION COEFFICIENT:..... NO DATA AVAILABLE.
 N-OCTANOL/WATER.....
 DECOMPOSITION TEMPERATURE..... NO DATA AVAILABLE.
 VISCOSITY..... NO DATA AVAILABLE.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:..... EXCESSIVE HEAT, SPARKS AND OPEN FLAME.
 CHEMICAL STABILITY:..... STABLE UNDER RECOMMENDED STORAGE CONDITIONS.
 POSSIBILITY OF HAZARDOUS REACTIONS..... VAPOURS MAY FORM EXPLOSIVE MIXTURE WITH AIR.
 CONDITIONS TO AVOID:..... HEAT, SPARKS AND OPEN FLAME.
 INCOMPATIBLE MATERIALS :..... STRONG OXIDIZING AGENTS.
 HAZARDOUS DECOMPOSITION PRODUCTS..... CARBON OXIDES.

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
TOLUENE	INH-RAT- 4H-12500-28800 MG/M3	ORAL-RAT- > 5580 MG/KG
ACUTE TOXICITY:		
ORAL LD50.....	SEE ABOVE.	
INHALATION LC50.....	SEE ABOVE.	
DERMAL LD50.....	RABBIT- >5000 mg/kg .	
SKIN CORROSION / IRRITATION.....	RABBIT - SKIN IRRITATION - 24H.	
SERIOUS EYE DAMAGE / EYE IRRITATION RESPIRATORY OR SKIN SENSITIZATION.	MAY CAUSE MILD, SHORT-LASTING DISCOMFORT TO EYES. NOT EXPECTED TO BE A RESPIRATORY OR SKIN SENSITIZER.	
GERM CELL MUTAGENICITY.....	GENOTOXICITY IN VITRO - RAT - LIVER. DNA DAMAGE.	
CARCINOGENICITY.....	NOT EXPECTED TO CAUSE CANCER.	
REPRODUCTIVE TOXICITY.....	NOT EXPECTED TO BE A REPRODUCTIVE TOXICANT.	
STOT - SINGLE EXPOSURE.....	MAY CAUSE DROWSINESS OR DIZZINESS.	
STOT - REPEAT EXPOSURE.....	CONCENTRATED, PROLONGED OR DELIBERATE EXPOSURE MAY CAUSE ORGAN DAMAGE.	
ASPIRATION HAZARD.....	MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.	
POTENTIAL HEALTH EFFECTS.....	INHALATION - MAY BE FATAL IF INHALED. MATERIAL IS EXTREMELY DESTRUCTIVE TO THE TISSUE OF THE MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT. CAUSES RESPIRATORY TRACT IRRITATION. INGESTION - MAY BE HARMFUL IF SWALLOWED. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. EYES - MAY CAUSE EYE IRRITATION. SKIN - MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN. MAY CAUSE SKIN IRRITATION.	
SIGNS AND SYMPTOMS OF EXPOSURE..	LUNG IRRITATION, CHEST PAIN, PULMONARY EDEMA, INHALATION STUDIES ON TOLUENE HAVE DEMONSTRATED THE DEVELOPMENT OF INFLAMMATORY AND ULCEROUS LESIONS OF THE PENIS, PREPUCE AND SCROTUM IN ANIMALS. CENTRAL NERVOUS SYSTEM DEPRESSION. GASTROINTESTINAL DISTURBANCE, NARCOSIS.	

PRODUCT: TOLUENE/TOLUOL

SECTION 12: ECOLOGICAL INFORMATION

PERSISTENCE AND DEGRADABILITY.....	READILY BIODEGRADABLE.
BIOACCUMULATIVE POTENTIAL.....	LEUCISCUS IDUS (GOLDEN OFRE) - 3 D (TOLUENE). BIOCONCENTRATION FACTOR (BCF): 90 (TOLUENE).
TOXICITY.....	TOXICITY TO FISH- LC50- ONCORTHYNCHUS MYKISS (RAINBOW TROUT) - 7.63 MG/L - 96H (TOLUENE). TOXICITY TO DAPHNIA- EC50- DAPHNIA MAGNA (WATER FLEA)- 8.0 MG/L 24h (TOLUENE).
MOBILITY IN SOIL.....	NO DATA AVAILABLE.
OTHER ADVERSE EFFECTS.....	TOXIC TO AQUATIC LIFE.

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHODS.....	BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AFTERBURNER AND SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY FLAMMABLE. OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS TO A LICENCED DISPOSAL COMPANY. BURN IN AN APPROVED INCINERATOR IN ACCORDANCE WITH ALL APPLICABLE LOCAL, PROVINCIAL AND FEDERAL LAWS AND REGULATIONS.
PACKAGING.....	EMPTY CONTAINERS MAY CONTAIN RESIDUE AND CAN BE DANGEROUS. DO NOT ATTEMPT TO REFILL OR CLEAN CONTAINERS WITHOUT PROPER INSTRUCTIONS.

SECTION 14: TRANSPORT INFORMATION

UN NUMBER.....	1294.
TDG CLASSIFICATION.....	3.
PACKING GROUP.....	II.
PROPER SHIPPING NAME.....	TOLUENE.
SPECIAL SHIPPING INSTRUCTIONS.....	REFER TO TRANSPORTATION OF DANGEROUS GOODS REGULATIONS.

SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION.....	B2, D2A, D2B.
HPR COMPLIANCE.....	THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE HPR AND THE SDS CONTAINS ALL THE INFORMATION REQUIRED BY THE HPR.
DSL.....	LISTED ON INVENTORY.
TSCA.....	LISTED ON INVENTORY.

SECTION 16: OTHER INFORMATION

PREPARED BY BEBBINGTON INDUSTRIES

JULY 2023

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