



MATERIAL SAFETY DATA SHEET

KEM CANADA MFG.
4 BLAIR DRIVE
BRAMPTON, ONTARIO
L6T 2H5
TEL# (905) 456-9444

EMERGENCY # CANUTEC (613) 996-6666
"USE IN CASE OF CHEMICAL EMERGENCY ONLY"

W.H.M.I.S. CLASSIFICATION:
B2, D1A, D2A, D2B

MATERIAL REFERENCE NO: 701500

SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: FUEL AD II	
CHEMICAL NAME : NOT APPLICABLE	CHEMICAL FAMILY : SOLVENT BLEND
CHEMICAL FORMULA: MIXTURE	MOLECULAR WEIGHT: NOT APPLICABLE
SYNONYMS: NONE	
MATERIAL USE: FUEL OIL SLUDGE CONDITIONER	

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROX. % CONCENT.	TLV PPM	C.A.S. N.A. U.N. NUMBERS	LD 50 ORAL, RAT
2-BUTOXYETHANOL	7.0-13.0	25	111-76-2	470 MG/KG
XYLENE	15.0-40.0	100	1330-20-7	4300 MG/KG
KEROSENE	60.0-100.0	5 MG/M3	8008-20-6	>5000 MG/KG
ALKYL PHENOL ETHOXYLATE	1.0-5.0	NOT AVAILABLE	9016-45-9	3000 MG/KG (EST.)

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: LIQUID		
ODOUR AND APPEARANCE: CLEAR AMBER LIQUID; MIXED SOLVENT ODOUR.		
ODOUR THRESHOLD (PPM)	SPECIFIC GRAVITY	VAPOUR PRESSURE (MM)
NOT AVAILABLE	0.841	NOT AVAILABLE
VAPOUR DENSITY (AIR=1)	EVAPORATION RATE	SOLUBILITY IN WATER
>1	(KEROSENE=1) ~1	(20°C) NEGLIGIBLE
BOILING POINT (C)	FREEZING POINT (C)	% VOLATILE (BY WEIGHT)
93	NOT AVAILABLE	70
pH (10% SOLUTION)	DENSITY (G/ML)	COEF.OF WATER/OIL DISTR
NOT APPLICABLE	NOT APPLICABLE	NOT AVAILABLE



MATERIAL SAFETY DATA SHEET

MATERIAL REFERENCE NO: 701500

SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

FLAMMABILITY: FLAMMABLE			
IF YES, UNDER WHICH CONDITIONS:			
MEANS OF EXTINCTION: CHEMICAL FOAM, CARBON DIOXIDE			
SPECIAL PROCEDURES: WEAR FULL PROTECTIVE GEAR INCLUDING SELF-CONTAINED BREATHING APPARATUS. EXTINGUISHING MEDIA CONTAINING WATER MUST BE APPLIED WITH CARE TO PREVENT FROTHING OR FOAMING, WHICH COULD SPREAD THE FIRE. VAPOURS CONCENTRATED IN A CONFINED OR POORLY VENTILATED AREA CAN BE IGNITED UPON CONTACT WITH A SPARK, FLAME OR HIGH INTENSITY SOURCE OF HEAT, AT CONCENTRATIONS OF 7-15% BY VOLUME.			
FLASH POINT (C) AND METHOD: 29.4 (TCC)			
HAZARDOUS COMBUSTION PRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE, VARIOUS HYDROCARBONS, TOXIC GASES.			
UPPER EXPLOSION LIMIT	LOWER EXPLOSION LIMIT	AUTOIGNITION TEMP(C)	
NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	
EXPLOSION DATA SENSITIVITY	RATE OF BURNING	EXPLOSIVE POWER	
TO CHEMICAL IMPACT			
NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	
SENSITIVITY TO STATIC DISCHARGE: NOT AVAILABLE			

SECTION V - REACTIVITY DATA

CHEMICAL STABILITY: NORMALLY STABLE			
IF NO, UNDER WHICH CONDITIONS: HIGH TEMPERATURES			
INCOMPATIBILITY TO OTHER SUBSTANCES: YES			
IF SO, WHICH ONES: AVOID CONTACT WITH STRONG OXIDIZING AGENTS OR OTHER REACTIVE MATERIALS, STRONG ALKALIES, ACIDS.			
REACTIVITY AND UNDER WHAT CONDITIONS: NOT ESTABLISHED			
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.			
HAZARDOUS DECOMPOSITION PRODUCTS: UNDEFINED ORGANICS.			

SECTION VI - HEALTH HAZARD DATA

ROUTE OF ENTRY:			
SKIN CONTACT: YES	SKIN ABSORPTION: YES	EYE CONTACT: YES	
INHALATION: YES	INGESTION: YES		



MATERIAL SAFETY DATA SHEET

MATERIAL REFERENCE NO: 701500

EFFECTS OF ACUTE EXPOSURE TO MATERIAL:
EYES-CONTACT MAY CAUSE STINGING OR BURNING, INTENSE WATERING, CONJUNCTIVITIS.
SKIN-CONTACT MAY CAUSE DRYING OF SKIN, CRACKING WITH IRRITATION.
INHALATION-MAY CAUSE IRRITATION OF NOSE, EYES AND THROAT, COUGHING, DIZZINESS, NAUSEA, DIFFICULTY IN BREATHING, CHEMICAL BRONCHITIS
EXCESSIVE INHALATION OF VAPOURS CAN CAUSE CNS DEPRESSION.
INGESTION-MAY CAUSE IRRITATION AND BURNING SENSATION OF LIPS, MOUTH AND THROAT, PAIN IN SWALLOWING. CAN ENTER LUNGS CAUSING VOMITING, LUNG INFLAMMATION AND DAMAGE.

EFFECTS OF CHRONIC EXPOSURE TO MATERIAL:
SEVERE OVEREXPOSURE OF XYLENE MAY LEAD TO COMA AND POSSIBLY DEATH DUE TO RESPIRATORY FAILURE.
EXCESSIVE SKIN CONTACT CAN LEAD TO DERMATITIS.

LD 50 OF MATL.	LC 50 OF MATL.	EXPOSURE LIMIT(S)	IRRITANCY OF MATL
NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	TOXIC

SENSITIZATION OF MATERIAL	SYNERGISTIC MATERIALS
NOT AVAILABLE	NOT AVAILABLE

CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY:
XYLENE MAY BE TOXIC TO EMBRYO OR FETUS AND MAY REDUCE FERTILITY.
CONTAINS 2-BUTOXYETHANOL-A HEMOLITIC AGENT CHARACTERIZED BY A REDUCTION IN RED BLOOD CELLS AND BLOOD IN THE URINE.

SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

GLOVES: RUBBER OR VINYL
RESPIRATORY: WORN BY PERSONS SENSITIVE TO FUMES
EYE: FACE SHIELD OR SAFETY GOGGLES
FOOTWEAR: IMPERMEABLE
CLOTHING: IMPERMEABLE
OTHER: EYE WASH AND SAFETY SHOWER
ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): LOCAL AS NEEDED TO CONTROL FUMES.

LEAK AND SPILL PROCEDURE: STOP LEAKS AND CONTAIN SPILL. PUMP SPILLED MATERIAL INTO METAL DRUMS FOR DISPOSAL OR RECLAIM. REMOVE REMAINING MATERIAL BY ABSORBING ON SAWDUST OR VERMICULITE AND PLACE IN METAL CONTAINERS. THEN THOROUGHLY WET VACUUM AREA OF SPILL. IF AREA IS POROUS REMOVE AS MUCH CONTAMINATED SOIL AS POSSIBLE INTO CONTAINERS.

WASTE DISPOSAL: DISPOSE IN ACCORDANCE WITH LOCAL, PROVINCIAL AND FEDERAL REGULATIONS.



MATERIAL SAFETY DATA SHEET

MATERIAL REFERENCE NO: 701500

SECTION VIII - FIRST AID MEASURES

PROCEDURES: EYES-IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR 15 MINUTES. IF PAIN OR IRRITATION PERSIST, SEEK MEDICAL ASSISTANCE. SKIN-REMOVE CONTAMINATED CLOTHING AND FLUSH AFFECTED AREA WITH WATER FOR 15 MINUTES. IF PAIN OR IRRITATION PERSIST, SEEK MEDICAL ASSISTANCE. LAUNDRY CLOTHING BEFORE REUSE. INHALATION-MOVE VICTIM TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, ADMINISTER ARTIFICIAL RESPIRATION AND THEN GIVE OXYGEN. GET MEDICAL ATTENTION. INGESTION-IF SWALLOWED-DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL ATTENTION.

SOURCES USED: RAW MATERIAL SUPPLIER'S MATERIAL SAFETY DATA SHEETS

ADDITIONAL INFORMATION: NONE

SECTION IX - TDG SHIPPING INFORMATION

SHIPPING NAME	CLASS	UN NO.	PG
FLAMMABLE LIQUID, TOXIC, N.O.S. (XYLENE, ETHYLENE GLYCOL DIBUTYL ETHER)	3(6.1)	1992	III

HANDLING PROCEDURES AND EQUIPMENT: AVOID CONTACT WITH EYES AND SKIN. KEEP AWAY FROM IGNITION SOURCES. WASH THOROUGHLY AFTER HANDLING.

STORAGE REQUIREMENTS: STORE IN A COOL, DRY WELL VENTILATED AREA IN ORIGINAL CONTAINER PROPERLY SEALED. STORE AWAY FROM INCOMPATIBLE MATERIALS.

SPECIAL SHIPPING INFORMATION: NONE

SECTION X - HMIS HAZARD RATING INFORMATION

FLAMMABILITY	REACTIVITY	HEALTH
2	0	2

SECTION XI - PREPARATION DATE OF MSDS

PREPARED BY: TECHNICAL DEPARTMENT TELEPHONE # (905) 456-9444

REVIEWED: JANUARY 11, 2003

DISCLAIMER:

THE INFORMATION CONTAINED HEREIN IS COMPILED FROM SOURCES BELIEVED TO BE RELIABLE. THE MANNER AND CONDITIONS OF USE AND HANDLING MAY INVOLVE OTHER AND ADDITIONAL CONSIDERATIONS. WE ACCEPT NO RESPONSIBILITY FOR THE ACCURACY, SUFFICIENCY, RELIABILITY OR FOR ANY LOSS OR INJURY RESULTING FROM THE USE OF THE INFORMATION.