



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: D2B,

MATERIAL REFERENCE NO: 712100

SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: KEMSURF 121
CHEMICAL NAME : NOT APPLICABLE

| CHEMICAL FORMULA: MIXTURE | MOLECULAR WEIGHT: NOT APPLICABLE |

MATERIAL USE: WATER TREATMENT SURFACTANT

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

| HAZARDOUS | APPROX. | TLV | C.A.S. N.A. | LD 50 |
| INGREDIENTS | % CONC. | PPM | U.N. NUMBERS | RAT |

9-OCTADECENAMIDE, N,N	15-45	NO DATA	93-83-4	2700 MG/Kg
BIS-(2-HYDROXYETHYL)-Z				
DIMETHYLBENZENE	7.0-15.0	NO DATA	1300-72-7	1000 MG/kg
SULFONATE				
POLYOXYETHYLENE	3.0-7.0	NO DATA	9003-11-6	NO DATA
POLYOXYPROPYLENE				
BLOCK CO-POLYMER				
POLYOXYETHYLENE	3.0-7.0	NO DATA	53637-25-5	NO DATA
POLYOXYPROPYLENE				
GLYCOL				
LINEAR ALCOHOL	1.0-5.0	NO DATA	68439-45-2	>5000 MG/KG
ETHOXYLATE				

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: LIQUID
ODOUR AND APPEARANCE: CLEAR, LIGHT ORANGE COLOUR; SLIGHT ODOUR.

| ODOUR THRESHOLD (PPM) | SPECIFIC GRAVITY | VAPOUR PRESSURE (MM) |
| NOT AVAILABLE | 1.02 | NOT AVAILABLE |

| VAPOUR DENSITY (AIR=1) | EVAPORATION RATE | SOLUBILITY IN WATER |
| NOT AVAILABLE | (WATER = 1) 1 | (20 ° C) COMPLETE |

| BOILING POINT (C) | FREEZING POINT (C) | % VOLATILE (BY WEIGHT) |
| ABOVE 100 (C) | NOT AVAILABLE | >50 |

| pH (1.0% SOLUTION) | DENSITY (G/ML) | COEF.OF WATER/OIL DISTR |
| 8-9 | NOT APPLICABLE | NOT AVAILABLE |



MATERIAL SAFETY DATA SHEET

MATERIAL REFERENCE NO: 712100

SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

FLAMMABILITY: NON-FLAMMABLE			
IF YES, UNDER WHICH CONDITIONS:			
MEANS OF EXTINCTION: WATER FOG, CARBON DIOXIDE, FOAM, DRY CHEMICAL			
SPECIAL PROCEDURES: AS FOR SURROUNDING MATERIALS.			
FLASH POINT (C) AND METHOD: NONE (TCC)			
HAZARDOUS COMBUSTION PRODUCTS: OXIDES OF CARBON AND NITROGEN.			
UPPER EXPLOSION LIMIT	LOWER EXPLOSION LIMIT	AUTOIGNITION TEMP (C)	
NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	
EXPLOSION DATA SENSITIVITY			
TO CHEMICAL IMPACT	RATE OF BURNING	EXPLOSIVE POWER	
NOT AVAILABLE	NOT APPLICABLE	NOT AVAILABLE	
SENSITIVITY TO STATIC DISCHARGE: NOT AVAILABLE			

SECTION V - REACTIVITY DATA

CHEMICAL STABILITY: STABLE			
IF NO, UNDER WHICH CONDITIONS:			
INCOMPATIBILITY TO OTHER SUBSTANCES: YES			
IF SO, WHICH ONES: STRONG ACIDS.			
REACTIVITY AND UNDER WHAT CONDITIONS: NONE KNOWN			
HAZARDOUS DECOMPOSITION PRODUCTS: NONE			

SECTION VI - HEALTH HAZARD DATA

ROUTE OF ENTRY:			
SKIN CONTACT: NO	SKIN ABSORPTION: NO	EYE CONTACT: YES	
INHALATION: NO	INGESTION: YES		



MATERIAL SAFETY DATA SHEET

MATERIAL REFERENCE NO: 712100

| EFFECTS OF ACUTE EXPOSURE TO MATERIAL: |
| EYES-CONTACT CAN CAUSE IRRITATION |
| |
| SKIN-PROLONGED OR REPEATED EXPOSURE MAY CAUSE IRRITATION. |
| |
| NO HAZARD DUE TO DERMAL ABSORPTION OR INHALATION. |
| |
| |

| EFFECTS OF CHRONIC EXPOSURE TO MATERIAL: |
| UNKNOWN. |
| |
| |
| |
| |

| LD 50 OF CONCENTRATE | EXPOSURE LIMIT(S) | IRRITANCY OF MATL |
| ORAL- 10 MG / M3 | NOT AVAILABLE | LOW |

| SENSITIZATION OF MATERIAL | SYNERGISTIC MATERIALS |
| NONE | NOT AVAILABLE |

| CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY: |
| NOT LISTED IN ANY OF OSHA STANDARD, SECTION 1910.1200 SOURCES AS |
| CARCINOGENIC. |
| |
| |

SECTION VII - PREVENTIVE MEASURES

| PERSONAL PROTECTIVE EQUIPMENT: |
| |
| GLOVES: RUBBER GLOVES RECOMMENDED |
| RESPIRATORY: NOT NORMALLY REQUIRED |
| EYE: SAFETY GLASSES OR GOGGLES RECOMMENDED |
| FOOTWEAR: NO SPECIAL REQUIREMENTS |
| CLOTHING: NO SPECIAL REQUIREMENTS |
| OTHER: EYE WASH AND SAFETY SHOWER |
| ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): GENERAL |
| IS SUFFICIENT. |

| LEAK AND SPILL PROCEDURE: CONTAIN SPILL. PREVENT SPILL FROM |
| ENTERING FISH-BEARING WATERS. PUMP INTO APPROPRIATE CONTAINER FOR |
| RECLAIM OR DISPOSAL. ABSORB REMAINING RESIDUE ONTO INERT ABSORBANT |
| AND SCOOP INTO DISPOSAL CONTAINER. |

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



MATERIAL SAFETY DATA SHEET

MATERIAL REFERENCE NO: 712100

SECTION VIII - FIRST AID MEASURES

PROCEDURES:
EYES-FLUSH WITH CLEAN, COOL WATER FOR 15 MINUTES. SEE A PHYSICIAN.
SKIN-WASH THOROUGHLY WITH SOAP AND WATER AND APPLY GLYCERIN. SEE A
PHYSICIAN IF IRRITATION OCCURS. REMOVE AND WASH CONTAMINATED
CLOTHING.
INHALATION-REMOVE TO FRESH AIR. GET MEDICAL ATTENTION.
INGESTION-IF SWALLOWED DO NOT INDUCE VOMITING. RINSE MOUTH WITH
WATER OR MILK THEN SLOWLY GIVE 1-2 GLASSES OF WATER OR MILK. AVOID
ALCOHOL. DO NOT GIVE ANYTHING BY MOUTH IF PERSON IS UNCONSCIOUS OR
CONVULSING. 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.	PACKING GROUP
NOT REGULATED			

HANDLING PROCEDURES AND EQUIPMENT: AVOID CONTACT WITH EYES AND SKIN.
WASH THOROUGHLY AFTER HANDLING.

STORAGE REQUIREMENTS: STORE IN A COOL, DRY AREA. KEEP CONTAINER
CLOSED WHEN NOT IN USE.

SPECIAL SHIPPING INFORMATION: NONE

SECTION X - HMIS HAZARD RATING INFORMATION

FLAMMABILITY	REACTIVITY	HEALTH
1	1	3

SECTION XI - PREPARATION DATE OF MSDS

PREPARED BY: TECHNICAL DEPARTMENT TELEPHONE # (905) 456-9444
REVIWED: OCTOBER 10, 2009

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 RESPONSIBILTY FOR THE
ACCURACY, SUFFICIENCY, RELIABILITY OR FOR ANY LOSS OR INJURY RESULTING
FROM THE USE OF THE INFORMATION.