



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: 128500

SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: ENVIROZYME	
CHEMICAL NAME: ENZYMES	CHEMICAL FAMILY: BACTERIAL CULTURE
CHEMICAL FORMULA: MIXTURE	MOLECULAR WEIGHT: MIXTURE
SYNONYMS: NONE	
MATERIAL USE: ORGANIC WASTE DIGESTER	

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROX. CONCENT.	TLV PPM	C.A.S. NUMBERS	LD 50 ORAL, RAT
ETHOXYLATED ALCOHOL	3.0-7.0	NO DATA	68439-46-3	1378 MG/KG
VIABLE BACTERIA CULTURES	10.0-30.0	NO DATA	NOT AVAILABLE	NOT AVAILABLE
D'LIMONENE	1.0-5.0	NO DATA	5989-27-5	4400 MG/KG

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: LIQUID	
ODOUR AND APPEARANCE: GREEN TURBID LIQUID, CITRUS ODOUR.	
ODOUR THRESHOLD (PPM)	SPECIFIC GRAVITY
NONE KNOWN	1.002
ODOUR THRESHOLD (PPM)	SPECIFIC GRAVITY
NONE KNOWN	1.002
VAPOUR DENSITY (AIR=1)	EVAPORATION RATE
EQUIVALENT TO WATER	EQUIVALENT TO WATER
SOLUBILITY IN WATER	(20° C) EMULSIFIABLE
BOILING POINT (C)	FREEZING POINT (C)
95-100	0 (EST.)
% VOLATILE (BY WEIGHT)	
>85	
pH	DENSITY (G/ML)
7.0-8.0	NOT APPLICABLE
COEF.OF WATER/OIL DISTR	
NOT AVAILABLE	



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SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

FLAMMABILITY: NON-FLAMMABLE			
IF YES, UNDER WHICH CONDITIONS:			
MEANS OF EXTINCTION: AS APPROPRIATE FOR SURROUNDING MATERIALS.			
SPECIAL PROCEDURES: WEAR FULL PROTECTIVE EQUIPMENT INCLUDING SELF-			
CONTAINED BREATHING APPARATUS.			
FLASH POINT (C) AND METHOD: >93.3 (TCC)			
HAZARDOUS COMBUSTION PRODUCTS: OXIDES OF CARBON, ACRID SMOKE AND			
IRRITATING FUMES.			
UPPER EXPLOSION LIMIT	LOWER EXPLOSION LIMIT	AUTOIGNITION TEMP (C)	
NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	
EXPLOSION DATA SENSITIVITY			
TO CHEMICAL IMPACT			
NOT APPLICABLE	NOT APPLICABLE	NOT AVAILABLE	
SENSITIVITY TO STATIC DISCHARGE: NOT APPLICABLE			

SECTION V - REACTIVITY DATA

CHEMICAL STABILITY: STABLE			
IF NO, UNDER WHICH CONDITIONS:			
INCOMPATIBILITY TO OTHER SUBSTANCES: YES			
IF SO, WHICH ONES: STRONG ACIDS, ALKALIES AND OXIDIZING AGENTS.			
REACTIVITY AND UNDER WHAT CONDITIONS: STRONG ACIDS AND STRONG ALKALI			
CAN INACTIVATE BIOLOGICAL CULTURES.			
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.			
HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION CAN YIELD			
OXIDES OF CARBON, UNIDENTIFIED ORGANIC COMPOUNDS.			

SECTION VI - HEALTH HAZARD DATA

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



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| EFFECTS OF ACUTE EXPOSURE TO MATERIAL: |
| EYES-CAN CAUSE MODERATE IRRITATION. CAN CAUSE INFECTION WHEN IN |
| CONTACT WITH OPEN WOUNDS. |
| SKIN-CONTACT CAN CAUSE IRRITATION. MAY CAUSE SLIGHT REDNESS ON HANDS |
| AND FOREARMS IF INDIVIDUAL HAS A HISTORY OF DERMAL ALLERGIC REACTION |
| SKIN ABSORPTION-SYSTEMIC TOXIC CONCENTRATIONS WILL PROBABLY NOT BE |
| ABSORBED THROUGH THE SKIN. |
| INHALATION-BREATHING OF VAPOURS OR MISTS CAN CAUSE IRRITATION OF |
| MUCOUS MEMBRANES, NOSE, EYES AND THROAT. |
| INGESTION-HARMFUL IF INGESTED. CAN CAUSE NAUSEA, DIARRHEA, VOMITING, |
ABDOMINAL CRAMPS.

| EFFECTS OF CHRONIC EXPOSURE TO MATERIAL: |
| SKIN-REPEATED OR PROLONGED CONTACT CAN CAUSE DERMATITIS AND SKIN |
| SENSITIZATION. |
| |

| LD 50 OF MATL. | LC 50 OF MATL. | EXPOSURE LIMIT(S) | IRRITANCY OF MATL |
| NOT AVAILABLE | NOT AVAILABLE | NONE KNOWN | EYE AND SKIN |
| | | | IRRITANT |
|-----

| SENSITIZATION OF MATERIAL | SYNERGISTIC MATERIALS |
| CRONIC EXPOSURE CAN SENSITIZE SKIN. | NOT AVAILABLE |
|-----

| CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY |
NONE IDENTIFIED.

SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

| GLOVES: RUBBER |
| RESPIRATORY: NOT NORMALLY REQUIRED |
| EYE: FACE SHIELD OR SAFETY GOGGLES IF SPLASHING IS POSSIBLE |
| FOOTWEAR: NO SPECIAL REQUIREMENTS |
| CLOTHING: ADEQUATE TO PREVENT CONTACT WITH SKIN. |
| OTHER: EYE WASH AND SAFETY SHOWER |
| ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): NONE FOR |
NORMAL USE. PROVIDE LOCAL VENTILATION IN CONFINED AREAS.

| LEAK AND SPILL PROCEDURE: PROVIDE ADEQUATE VENTILATION. CONTAIN |
| SPILL. TRANSFER TO SUITABLE CONTAINER FOR REUSE OR DISPOSAL. ABSORB |
| REMAINING MATERIAL ONTO ABSORBENT AND SCOOP INTO DISPOSAL CONTAINER. |
FLUSH RESIDUAL WITH VOLUMES OF WATER.

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



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SECTION VIII - FIRST AID MEASURES

PROCEDURES:
EYES-FLUSH WITH WATER FOR AT LEAST 15 MINUTES. HAVE EYES EXAMINED
AND TREATED BY A PHYSICIAN.
SKIN-REMOVE CONTAMINATED CLOTHING AND WASH AFFECTED AREA THOROUGHLY
WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION.
WASH CLOTHING BEFORE REUSE.
INGESTION-DRINK WATER OR MILK TO DILUTE. INDUCE VOMITING ONLY IF
ADVISED BY A PHYSICIAN. GET 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.
AVOID CONTACT WITH OPEN CUTS OR WOUNDS. WASH THOROUGHLY AFTER
HANDLING.

STORAGE REQUIREMENTS: AVOID PROLONGED EXPOSURE TO TEMPERATURES
ABOVE 45(C). KEEP FROM FREEZING.

SPECIAL SHIPPING INFORMATION: KEEP FROM FREEZING

SECTION X - HMIS HAZARD RATING INFORMATION

FLAMMABILITY	REACTIVITY	HEALTH
0	0	2

SECTION XI - PREPARATION DATE OF MSDS

PREPARED BY: TECHNICAL DEPARTMENT	TELEPHONE # (905) 456-9444
REVIEWED: OCTOBER 2, 2009	REPLACES: APRIL 16, 2005

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