

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
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 CONCENTRATED	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.

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| 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 | RATE OF BURNING | EXPLOSIVE POWER
| 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.
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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.

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| 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 - HMTS HAZARD RATING INFORMATION

FLAMMABILITY	REACTIVITY	HEALTH
0	0	2

SECTION XI - PREPARATION DATE OF MSDS

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