



# 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: 132100

## SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: FREE FLOW	
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
ALCOHOL ETHOXYLATE	1.0-5.0	NOT AVAILABLE	68131-39-5	2000 MG/KG
VIABLE BACTERIA CULTURES	1.0-5.0	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE

## SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: LIQUID		
ODOUR AND APPEARANCE: WHITE TURBID LIQUID, PERFUMED ODOUR.		
ODOUR THRESHOLD (PPM) NOT AVAILABLE	SPECIFIC GRAVITY 1.001	VAPOUR PRESSURE (MM) NOT AVAILABLE
VAPOUR DENSITY (AIR=1) EQUIVALENT TO WATER	EVAPORATION RATE EQUIVALENT TO WATER	SOLUBILITY IN WATER (20° C) EMULSIFIABLE
BOILING POINT (C) ~100	FREEZING POINT (C) 0 (EST.)	% VOLATILE (BY WEIGHT) 96
pH CONCENTRATED 6.0-8.0	DENSITY (G/ML) 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: WATER FOG, FOAM, DRY CHEMICAL, CARBON DIOXIDE		
SPECIAL PROCEDURES: WEAR FULL PROTECTIVE EQUIPMENT INCLUDING SELF-CONTAINED BREATHING APPARATUS.		
FLASH POINT (C) AND METHOD: NONE (TCC)		
HAZARDOUS COMBUSTION PRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE, IRRITATING FUMES, UNIDENTIFIED ORGANICS.		
UPPER EXPLOSION LIMIT NOT AVAILABLE	LOWER EXPLOSION LIMIT NOT AVAILABLE	AUTOIGNITION TEMP(C) NOT AVAILABLE
EXPLOSION DATA SENSITIVITY TO CHEMICAL IMPACT NOT APPLICABLE	RATE OF BURNING NOT APPLICABLE	EXPLOSIVE POWER NOT APPLICABLE
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 AND STRONG ALKALIS, STRONG 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 WILL EMIT OXIDES OF CARBON, IRRITATING FUMES, UNIDENTIFIED ORGANICS.		

SECTION VI - HEALTH HAZARD DATA

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

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EFFECTS OF ACUTE EXPOSURE TO MATERIAL:

EYES-MAY CAUSE IRRITATION. CAN CAUSE INFECTION WHEN IN CONTACT WITH OPEN WOUNDS.

SKIN-CONTACT 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.

INGESTION-SWALLOWING OF LARGE AMOUNTS MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA.

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	MILD

SENSITIZATION OF MATERIAL	SYNERGISTIC MATERIALS
CHRONIC EXPOSURE CAN SENSITIZE SKIN	NOT AVAILABLE

CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY
NONE KNOWN

SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

GLOVES: IMPERMEABLE RECOMMENDED

RESPIRATORY: NOT NORMALLY REQUIRED. APPROVED VAPOUR CANISTER IF SYMPTOMS OCCUR.

EYE: SAFETY GOGGLES RECOMMENDED

FOOTWEAR: NO SPECIAL REQUIREMENTS

CLOTHING: NO SPECIAL REQUIREMENTS

OTHER: EYE WASH AND SAFETY SHOWER

ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): PROVIDE LOCAL OR MECHANICAL VENTILATION IN CONFINED OR POORLY VENTILATED AREAS.

LEAK AND SPILL PROCEDURE: PROVIDE ADEQUATE VENTILATION. CONTAIN SPILL. IF POSSIBLE, FLUSH TO WASTE TREATMENT SEWER OR 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 WHILE HOLDING EYELIDS OPEN. HAVE EYES EXAMINED AND TREATED BY A PHYSICIAN.

SKIN- REMOVE CONTAMINATED CLOTHING AND WASH AFFECTED AREA THOROUGHLY WITH SOAP AND WATER. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR. WASH CLOTHING BEFORE REUSE.

INGESTION-DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. GET MEDICAL ATTENTION.

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

| ADDITIONAL INFORMATION: NONE

## SECTION IX - TDG SHIPPING INFORMATION

SHIPPING NAME NOT REGULATED	CLASS	UN NO.	PACKING GROUP
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HANDLING PROCEDURES AND EQUIPMENT: AVOID CONTACT WITH EYES AND SKIN.  
AVOID CONTACT WITH OPEN 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 0	REACTIVITY 0	HEALTH 1
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## SECTION XI - PREPARATION DATE OF MSDS

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