



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: C, D1B, E, F

MATERIAL REFERENCE NO: 248700

SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: PEROXIDE 17	
CHEMICAL NAME: HYDROGEN PEROXIDE CHEMICAL FAMILY: INORGANIC PEROXIDE	
CHEMICAL FORMULA: H2O2	MOLECULAR WEIGHT: NOT AVAILABLE
SYNONYMS: NONE	
MATERIAL USE: OXIDIZER	

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROX. % CONCENT.	TLV PPM	C.A.S. NUMBERS	LD 50 ORAL, RAT
HYDROGEN PEROXIDE	10.0-30.0	1	7722-84-1	2000 MG/KG (MOUSE)

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: LIQUID	
ODOUR AND APPEARANCE: CLEAR COLOURLESS LIQUID; ODOURLESS.	
ODOUR THRESHOLD (PPM)	SPECIFIC GRAVITY
NOT AVAILABLE	1.075
VAPOUR PRESSURE	
18 mmHg @ 20 (C)	
VAPOUR DENSITY (AIR=1)	EVAPORATION RATE
1	(BUTYL ACETATE=1) >1
SOLUBILITY IN WATER	
(20°C) COMPLETE	
BOILING POINT (C)	FREEZING POINT (C)
104.4	APPROX. -0.45
% VOLATILE (BY WEIGHT)	
100	
pH (100% SOLUTION)	DENSITY (G/ML)
1.0-3.0	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: WATER, WATER FOG, CARBON DIOXIDE.			
SPECIAL PROCEDURES: WEAR FULL PROTECTIVE GEAR INCLUDING SELF-			
CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH			
WATER.			
FLASH POINT (C) AND METHOD: NON-COMBUSTIBLE			
HAZARDOUS COMBUSTION PRODUCTS: GIVES OFF OXYGEN WHICH SUPPORTS			
COMBUSTION.			
UPPER EXPLOSION LIMIT	LOWER EXPLOSION LIMIT	AUTOIGNITION TEMP (C)	
NON COMBUSTIBLE	NON COMBUSTIBLE	NON COMBUSTIBLE	
EXPLOSION DATA SENSITIVITY			
TO CHEMICAL IMPACT			
NO DATA	NOT APPLICABLE	NO DATA	
SENSITIVITY TO STATIC DISCHARGE: NO DATA			

SECTION V - REACTIVITY DATA

CHEMICAL STABILITY: NORMALLY STABLE			
IF NO, UNDER WHICH CONDITIONS: HIGH HEAT AND CONTAMINATION MAY CAUSE			
PRODUCT TO BECOME UNSTABLE.			
INCOMPATIBILITY TO OTHER SUBSTANCES: YES			
IF SO, WHICH ONES: REDUCING AGENTS, WOOD, PAPER, OTHER COMBUSTIBLES.			
AVOID DIRT, ORGANICS, CYANIDES, COMBUSTIBLES, IRON AND OTHER HEAVY			
METALS, COPPER ALLOYS, CAUSTIC.			
REACTIVITY AND UNDER WHAT CONDITIONS: YES			
INCOMPATIBLE MATERIALS MAY CAUSE PRODUCT INSTABILITY.			
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.			
HAZARDOUS DECOMPOSITION PRODUCTS: OXYGEN WHICH SUPPORTS COMBUSTION.			

SECTION VI - HEALTH HAZARD DATA

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



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EFFECTS OF ACUTE EXPOSURE TO MATERIAL:
EYES-SEVERE IRRITANT. CORROSIVE TO EYES. MAY CAUSE IRREVERSIBLE
TISSUE DAMAGE, INCLUDING BLINDNESS.
SKIN-SEVERE IRRITANT. CORROSIVE TO SKIN. MAY CAUSE SKIN RASH.
INHALATION-BREATHING OF MISTS OR VAPOURS MAY BE SEVERELY IRRITATING
TO NOSE, THROAT AND LUNGS. USUALLY SUBSIDES AFTER EXPOSURE CEASES.
INGESTION-CORROSIVE TO GASTROINTESTINAL TRACT. DO NOT INGEST. MAY
BE FATAL IF SWALLOWED.

EFFECTS OF CHRONIC EXPOSURE TO MATERIAL:
EYES-PROLONGED EXPOSURE MAY CAUSE CORNEAL OR CONJUNCTIVAL ULCERATION
SKIN-PROLONGED EXPOSURES MAY RESULT IN SKIN BURNS OR ULCERATION.
INHALATION-MAY LEAD TO TEMPORARY LUNG IRRITATION EFFECTS WITH COUGH,
DISCOMFORT, DIFFICULTY IN BREATHING, SHORTNESS OF BREATH.
INGESTION

LD 50 OF MATL. (ORAL, RAT)	LC 50 OF MATL. (RAT)	EXPOSURE LIMIT(S) TLV 1 PPM	IRRITANCY OF MATL SEVERE IRRITANT
>225 MG/KG AND <1200 MG/KG	>0.17 MG/L (50% H2O2)		CORROSIVE

SENSITIZATION OF MATERIAL	SYNERGISTIC MATERIALS
NO DATA	NOT AVAILABLE

CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY:
THERE ARE REPORTS OF LIMITED EVIDENCE OF CARCINOGENICITY TO MICE
ADMINISTERED HIGH CONCENTRATION IN THEIR DRINKING WATER. HOWEVER
THE INTERNATIONAL AGENCY FOR CANCER RESEARCH CONCLUDED THAT HYDROGEN
PEROXIDE COULD NOT BE CLASSIFIED AS TO ITS CARCINOGENICITY TO HUMANS

SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

GLOVES: LIQUID PROOF RUBBER OR NEOPRENE
RESPIRATORY: SELF-CONTAINED BREATHING APPARATUS IF CONC. EXCEEDS 10
PPM.DO NOT USE OXIDIZABLE SORBANTS(IE:ACTIVATED CARBON)
EYE: CUP TYPE CHEMICAL GOGGLES OR FULL FACE SHIELD.
FOOTWEAR: RUBBER OR NEOPRENE. (AVOID LEATHER).
CLOTHING: POLYESTER OR ACRYLIC (AVOID COTTON, WOOL OR LEATHER)
OTHER: EYE WASH AND SAFETY SHOWER
ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): MECHANICAL
OR LOCAL TO PREVENT RELEASE OF VAPOUR/MIST INTO WORK ENVIRONMENT.

LEAK AND SPILL PROCEDURE: STOP LEAKS AND CONTAIN SPILL. DILUTE SPILL
WITH LARGE AMOUNTS OF WATER AND HOLD UNTIL H2O2 DECOMPOSES. ANY
COMBUSTIBLE MATERIALS CONTAMINATED WITH HYDROGEN PEROXIDE SHOULD BE
COMPLETELY SUBMERSED IN WATER TO REMOVE RESIDUAL PEROXIDE. RESIDUAL
PEROXIDE THAT IS ALLOWED TO DRY ON COMBUSTIBLE MATERIALS CAN CAUSE
THEM TO IGNITE.

WASTE DISPOSAL: CONSULT APPROPRIATE REGULATORY AGENCY. IT MAY BE
ACCEPTABLE TO DISCHARGE DECOMPOSED MATERIAL INTO SUITABLE WASTE
TREATMENT SYSTEM.



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SECTION VIII - FIRST AID MEASURES

| PROCEDURES: EYES-IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR 15 |
| MINUTES. GET MEDICAL ATTENTION. |
| SKIN-IMMEDIATELY REMOVE CONTAMINATED CLOTHING AND FLUSH AFFECTED |
| AREA WITH WATER FOR AT LEAST 15 MINUTES. SEEK MEDICAL ASSISTANCE. |
| LAUNDER CLOTHING BEFORE REUSE. |
| INHALATION-MOVE VICTIM TO FRESH AIR. IF BREATHING IS DIFFICULT OR |
| DISCOMFORT OCCURS, GET MEDICAL ATTENTION. |
| INGESTION-IF SWALLOWED, DRINK PLENTY OF WATER IMMEDIATELY TO DILUTE |
| DO NOT INDUCE VOMITING. DO NOT GIVE ANYTHING BY MOUTH IF PERSON IS |
| CONVULSING OR UNCONSCIOUS. GET MEDICAL ASSISTANCE. |

| 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
HYDROGEN PEROXIDE AQUEOUS SOLUTION	5.1	2984	III

| HANDLING PROCEDURES AND EQUIPMENT: WEAR RECOMMENDED PROTECTIVE |
| EQUIPMENT. CONTAMINATION OF PRODUCT MAY CAUSE DECOMPOSITION WHICH |
| CAN GENERATE OXYGEN AND PRESSURE BUILDUP IN CONTAINER. SHOULD BE |
| STORED IN VENTILATED CONTAINERS. DO NOT RETURN UNUSED PRODUCT TO |
| ORIGINAL CONTAINER. |

| STORAGE REQUIREMENTS: STORE IN A COOL, DRY WELL-VENTILATED AREA IN |
| ORIGINAL CONTAINER PROPERLY SEALED. |

| SPECIAL SHIPPING INFORMATION: HEATED |

SECTION X - HMIS HAZARD RATING INFORMATION

FLAMABILITY	REACTIVITY	HEALTH
0	1	2

SECTION XI - PREPARATION DATE OF MSDS

| PREPARED BY: TECHNICAL DEPARTMENT TELEPHONE # (905) 456-9444 |
| REVIEWED: OCTOBER 4, 2009 |

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