



# 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 A, D2B

MATERIAL REFERENCE NO: 112221

## SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: CONTACT CLEANER III	
CHEMICAL NAME: NOT APPLICABLE	CHEMICAL FAMILY: PRESSURIZED BLEND
CHEMICAL FORMULA: MIXTURE	MOLECULAR WEIGHT: NOT APPLICABLE
SYNONYMS: NONE	
MATERIAL USE: HI-PURITY CONTACT CLEANER	

## SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS   INGREDIENTS	APPROX.   % CONCENT.	TLV   PPM	C.A.S.   NUMBERS	LD 50   ORAL, RAT
1,1,1,2-TETRAFLUORO-   ETHANE	40.0-60.0	1000	811-97-2	NO DATA
N-PROPYL BROMIDE   PROPELLANT	10.0-30.0	NO DATA	106-94-5	4260 MG/KG
N-PROPANOL	1.0-5.0	200	71-23-8	1870 MG/KG

## SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: AEROSOL		
ODOUR AND APPEARANCE: CLEAR, LIQUID; BROMIDE TYPE ODOUR.		
ODOUR THRESHOLD (PPM)   NOT AVAILABLE	SPECIFIC GRAVITY   (CONCENTRATE) 1.24	VAPOUR PRESSURE (MM)   NOT AVAILABLE
VAPOUR DENSITY (AIR=1)   > 1	EVAPORATION RATE   NOT AVAILABLE	SOLUBILITY IN WATER   (20°C) SLIGHT
BOILING POINT (C)   INITIAL (FILL) ~69	FREEZING POINT (C)   NOT AVAILABLE	% VOLATILE (BY WEIGHT)   100
pH (10% SOLUTION)   NOT APPLICABLE	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: FOAM, CO2, DRY CHEMICAL.		
SPECIAL PROCEDURES: WEAR FULL PROTECTIVE GEAR INCLUDING SELF		
CONTAINED BREATHING APPARATUS. USE SHIELDING TO PROTECT FROM		
VENTING, BURSTING OR RUPTURING CONTAINERS. USE WATER FOG TO COOL		
FIRE EXPOSED CONTAINERS.		
FLASH POINT (C) AND METHOD: NONE		
HAZARDOUS COMBUSTION PRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE,		
HALOGENATED COMPOUNDS.		
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		PRESSURIZED CONTAINER
NOT AVAILABLE	NOT APPLICABLE	KEEP TEMP. BELOW 49C
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 OXIDIZING AGENTS.		
REACTIVITY AND UNDER WHAT CONDITIONS: NONE KNOWN.		
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.		
HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION WILL GIVE		
CARBON DIOXIDE, CARBON MONOXIDE, HYDROGEN CHLORIDE, HYDROGEN		
FLUORIDE, CHLORINE.		

## 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-CONTACT MAY CAUSE MINOR IRRITATION.  
SKIN-CONTACT MAY CAUSE IRRITATION.  
INHALATION-MAY CAUSE IRRITATION OF NASAL AND RESPIRATORY PASSAGES.  
INGESTION-CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING,  
DIARRHEA. ASPIRATION OF CHEMICAL INTO LUNGS CAN CAUSE CHEMICAL  
PNEUMONITIS.

EFFECTS OF CHRONIC EXPOSURE TO MATERIAL:  
SKIN-FREQUENT OR PROLONGED CONTACT MAY CAUSE IRRITATION.  
INHALATION-EXCESSIVE INHALATION MAY IRRITATE THE UPPER RESPIRATORY  
TRACT AND CAUSE NAUSEA, AND OTHER CENTRAL NERVOUS SYSTEM EFFECTS.

LD 50 OF MATL.	LC 50 OF MATL.	EXPOSURE LIMIT(S)	IRRITANCY OF MATL
NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	LOW

SENSITIZATION OF MATERIAL	SYNERGISTIC MATERIALS
NOT KNOWN	NONE KNOWN

CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY:  
NONE KNOWN

## SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

GLOVES: CHEMICAL RESISTANT.  
RESPIRATORY: NOT NORMALLY REQUIRED. FOR PROLONGED EXPOSURES OR IF  
TLV IS EXCEEDED USE APPROVED ORGANIC CANISTER OR SELF  
CONTAINED BREATHING APPARATUS.  
EYE: CHEMICAL GOGGLES AS REQUIRED.  
FOOTWEAR: NO SPECIAL REQUIREMENTS.  
CLOTHING: NO SPECIAL REQUIREMENTS.  
OTHER: EYE WASH AND SAFETY SHOWER  
ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): LOCAL TO  
MAINTAIN LEVELS BELOW TLV.

LEAK AND SPILL PROCEDURE: ALLOW PROPELLANT TO EVAPORATE. MAINTAIN  
ADEQUATE VENTILATION. ABSORB ONTO SUITABLE ABSORBANT AND SWEEP UP.  
WASH FLOOR TO REMOVE RESIDUAL CHEMICAL.

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



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## SECTION VIII - FIRST AID MEASURES

PROCEDURES:
EYES-FLUSH WITH RUNNING WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ASSISTANCE.
SKIN-FLUSH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION OCCURS.
INHALATION-REMOVE TO FRESH AIR. IF BREATHING IS DIFFICULT GIVE OXYGEN. IF NOT BREATHING, ADMINISTER ARTIFICIAL RESPIRATION AND THEN GIVE OXYGEN. GET MEDICAL ASSISTANCE.
INGESTION-IF SWALLOWED, DO NOT INDUCE VOMITING. 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.	PG
D.G. Safety Marks are in accordance with 49 CFR			
HANDLING PROCEDURES AND EQUIPMENT: AVOID CONTACT WITH EYES AND SKIN. USE IN WELL-VENTILATED AREAS ONLY.			
STORAGE REQUIREMENTS: STORE IN A COOL, DRY, WELL VENTILATED AREA AWAY FROM OXIDIZING AGENTS. DO NOT STORE WHERE TEMPERATURES EXCEED 49 (C).			
SPECIAL SHIPPING INFORMATION: NON-HEATED			

## 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: JULY 26, 2003	

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