



# 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, D2B, D2A

MATERIAL REFERENCE NO: 520000

## SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: CSP 200	
CHEMICAL NAME : NOT APPLICABLE	CHEMICAL FAMILY : NITRITES
CHEMICAL FORMULA: MIXTURE	MOLECULAR WEIGHT: NOT APPLICABLE
SYNONYMS: NONE	
MATERIAL USE: CLOSED SYSTEM CORROSION INHIBITOR	

## SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROX. % CONCENT.	TLV PPM	C.A.S. NUMBERS	LD 50 ORAL, RAT
SODIUM NITRITE	60.0-100.0	NO DATA	7632-00-0	180 MG/KG
BORAX PENTAHYDRATE	5.0-10.0	>3MG/M3	1303-86-2	NOT AVAILABLE

## SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: POWDER		
ODOUR AND APPEARANCE: OFF WHITE COLOURED POWDER, LOW ODOUR		
ODOUR THRESHOLD (PPM) NOT AVAILABLE	SPECIFIC GRAVITY 2.10	VAPOUR PRESSURE (MM) NOT APPLICABLE
VAPOUR DENSITY (AIR=1) NOT APPLICABLE	EVAPORATION RATE NOT APPLICABLE	SOLUBILITY IN WATER (20°C) COMPLETE
BOILING POINT (C) DECOMPOSES ABOVE 320 C	FREEZING POINT (C) NOT AVAILABLE	% VOLATILE (BY WEIGHT) <5
pH (10% SOLUTION) 10.0-11.0	DENSITY (G/ML) NOT AVAILABLE	COEF.OF WATER/OIL DISTR NOT AVAILABLE

MATERIAL REFERENCE NO: 520000

SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

FLAMMABILITY: NON-FLAMMABLE		
IF YES, UNDER WHICH CONDITIONS:		
MEANS OF EXTINCTION: CHEMICAL FOAM, CARBON DIOXIDE, WATER FOG		
SPECIAL PROCEDURES: WEAR FULL PROTECTIVE GEAR INCLUDING SELF-CONTAINED BREATHING APPARATUS. MAY EXPLODE WHEN HEATED ABOVE 537 C. WILL ACCELERATE COMBUSTION OF ORGANIC OR COMBUSTIBLE MATERIALS.		
FLASH POINT (C) AND METHOD: NONE (TCC)		
HAZARDOUS COMBUSTION PRODUCTS: MAY EVOLVE NITROGEN OXIDES, SMOKE, SOOT, CARBON DIOXIDE, CARBON MONOXIDE.		
UPPER EXPLOSION LIMIT NOT AVAILABLE	LOWER EXPLOSION LIMIT NOT AVAILABLE	AUTOIGNITION TEMP(C) NOT AVAILABLE
EXPLOSION DATA SENSITIVITY TO CHEMICAL IMPACT NOT AVAILABLE	RATE OF BURNING NOT AVAILABLE	EXPLOSIVE POWER NOT AVAILABLE
SENSITIVITY TO STATIC DISCHARGE: NOT AVAILABLE		

SECTION V - REACTIVITY DATA

CHEMICAL STABILITY: STABLE
IF NO, UNDER WHICH CONDITIONS:
HAZARDOUS DECOMPOSITION WILL NOT OCCUR.
INCOMPATIBILITY TO OTHER SUBSTANCES: YES (IS A STRONG OXIDIZER)
IF SO, WHICH ONES: ACIDS, AMMONIUM COMPOUNDS, REDUCING AGENTS SUCH AS CYANIDES, THIOCYANATES AND THIOSULFATES.
REACTIVITY AND UNDER WHAT CONDITIONS: YES TEMPERATURES ABOVE 320 C CAUSE DECOMPOSITION. PROLONGED EXPOSURE TO AIR WILL SLOWLY OXIDIZE NITRITE TO NITRATE.
HAZARDOUS DECOMPOSITION PRODUCTS: CAN DECOMPOSE ABOVE 320 C.

SECTION VI - HEALTH HAZARD DATA

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



# MATERIAL SAFETY DATA SHEET

MATERIAL REFERENCE NO: 520000

EFFECTS OF ACUTE EXPOSURE TO MATERIAL:  
EYES-CONTACT MAY CAUSE IRRITATION.  
SKIN-PROLONGED CONTACT MAY CAUSE IRRITATION.  
INHALATION-HIGH CONCENTRATIONS MAY CAUSE IRRITATION OF RESPIRATORY TRACT AND LUNGS. LARGE AMOUNTS MAY CAUSE SYSTEMIC EFFECTS.  
INGESTION-MAY IRRITATE MOUTH, ESOPHAGUS, AND STOMACH. SODIUM NITRITE IS USED IN FOOD AT LOW LEVELS (< 200PPM). INGESTION OF LARGER AMOUNTS CAN RESULT IN ACUTE TOXIC EFFECTS WITH NAUSEA, CONVERSION OF HEMOGLOBIN TO METHEMOGLOBIN, MARKED REDUCTION IN BLOOD PRESSURE WITH COLLAPSE, COMA AND POSSIBLE DEATH.

EFFECTS OF CHRONIC EXPOSURE TO MATERIAL:  
INHALATION-MAY CAUSE CHEMICAL BRONCHITIS.  
SKIN-PROLONGED CONTACT MAY CAUSE DERMATITIS.

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

SENSITIZATION OF MATERIAL NOT AVAILABLE	SYNERGISTIC MATERIALS NOT AVAILABLE
--	--

CARCINOGENICITY-NOT A CARCINOGEN.  
REPRODUCTIVE EFFECTS-SODIUM NITRITE SHOWED EFFECTS ON FETUS OF ANIMALS AT MODERATE TO HIGH DOSAGES.  
MUTAGENICITY- SODIUM NITRITE SHOWED MUTAGENIC EFFECTS ON HUMANS AND ANIMALS. (SOMATIC CELLS)

## SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

GLOVES: RUBBER OR VINYL
RESPIRATORY: WORN BY PERSONS SENSITIVE TO FUMES
EYE: FACE SHIELD OR SAFETY GOGGLES
CLOTHING: IMPERMEABLE
OTHER: EYE WASH AND SAFETY SHOWER
ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): MECHANICAL RECOMMENDED.

LEAK AND SPILL PROCEDURE: SWEEP OR SHOVEL SPILLED MATERIAL INTO APPROPRIATE CONTAINER FOR RECLAIM OR DISPOSAL. WASH REMAINING WITH COPIOUS AMOUNTS OF WATER. KEEP CONTAMINATED WATER FROM ENTERING SEWERS AND WATERWAYS.

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



# MATERIAL SAFETY DATA SHEET

MATERIAL REFERENCE NO: 520000

## SECTION VIII - FIRST AID MEASURES

PROCEDURES: EYES-IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR 15 MINUTES. IF PAIN OR IRRITATION PERSIST, SEEK MEDICAL ASSISTANCE. SKIN-REMOVE CONTAMINATED CLOTHING AND FLUSH AFFECTED AREA WITH WATER FOR 15 MINUTES OR UNTIL ALL CHEMICAL IS REMOVED. GET MEDICAL ASSISTANCE. LAUNDER CLOTHING BEFORE REUSE. INHALATION-MOVE VICTIM TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, ADMINISTER ARTIFICIAL RESPIRATION AND THEN GIVE OXYGEN. GET MEDICAL ATTENTION. INGESTION-IF SWALLOWED-INDUCE VOMITING AS INSTRUCTED BY A PHYSICIAN. GIVE 2-4 GLASSES OF WATER AND INDUCE VOMITING AGAIN. REPEAT UNTIL VOMITUS IS CLEAR. GET IMMEDIATE 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
OXIDIZING SOLID, TOXIC, N.O.S. (SODIUM NITRITE)	5.1 (6.1)	3087	II

HANDLING PROCEDURES AND EQUIPMENT: AVOID CONTACT WITH FLAMMABLE OR COMBUSTIBLE MATERIALS. WASH THOROUGHLY AFTER HANDLING.

STORAGE REQUIREMENTS: STORE IN A COOL, DRY WELL-VENTILATED AREA IN ORIGINAL CONTAINER. KEEP CONTAINER CLOSED WHEN NOT IN USE.

SPECIAL SHIPPING INFORMATION: OXIDIZER

## SECTION X - HMIS HAZARD RATING INFORMATION

FLAMMABILITY	REACTIVITY	HEALTH
1	1	2

## SECTION XI - PREPARATION DATE OF MSDS

PREPARED BY: TECHNICAL DEPARTMENT      TELEPHONE # (905) 456-9444  
REVIEWED: SEPTEMBER 14, 2003

## DISCLAIMER:

THE INFORMATION CONTAINED HEREIN IS COMPILED FROM SOURCES BELIEVED TO BE RELIABLE. THE MANNER AND CONDITIONS OF USE AND HANDLING MAY INVOLVE OTHER AND ADDITIONAL CONSIDERATIONS. WE ACCEPT NO RESPONSIBILITY FOR THE ACCURACY, SUFFICIENCY, RELIABILITY OR FOR ANY LOSS OR INJURY RESULTING FROM THE USE OF THE INFORMATION.