



# KENCRO

## CHEMICALS

SODIUM BISULPHITE

### MATERIAL SAFETY DATA SHEET

#### SECTION 1: PRODUCT AND COMPANY INFORMATION

**PRODUCT IDENTIFIER:** SODIUM BISULPHITE  
**PRODUCT USE:** REFER TO TECHNICAL LITERATURE  
**CHEMICAL FAMILY:** BISULPHITE, SODIUM SALT  
**SUPPLIER'S NAME AND ADDRESS:** KENCRO CHEMICALS LIMITED  
2172 WYECROFT RD., UNIT #4  
OAKVILLE, ON  
L6L 5V6  
905-827-4133  
**24 HR. EMERGENCY NUMBER:** 613-996-6666 (CANUTEC)

#### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	C.A.S. #	WT.%	LC50	LD50 (ORAL, RAT)
SODIUM BISULPHITE	7631-90-5	30 - 60	N/AV.	1420mg/kg

#### SECTION 3: HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW

DANGER - - CORROSIVE.  
CAUSES SKIN AND EYE BURNS.  
MAY BE FATAL IF SWALLOWED OR INHALED.  
MAY CAUSE SENSITIZATION BY INHALATION.

##### SIGNS AND SYMPTOMS OF SHORT-TERM EXPOSURE:

**SKIN CONTACT:** CAUSES CHEMICAL BURNS. SYMPTOMS OF SKIN IRRITATION ARE REDENNING, SWELLING, RASH, SCALING OR BLISTERING.

**SKIN ABSORPTION:** N/AV.

**EYE CONTACT:** CAUSES CHEMICAL BURNS. MAY CAUSE BLINDNESS. VAPOURS MAY CAUSE IRRITATION TO EYES, REDNESS AND PAIN. MAY CAUSE CORNEAL DAMAGE AND CONJUNCTIVITIS.

**INHALATION:** MAY CAUSE RESPIRATORY TRACT IRRITATION TO THE NOSE AND THROAT. SULPHUR DIOXIDE GIVEN OFF BY THIS PRODUCT HAS BEEN SHOWN TO CAUSE BREATHING DIFFICULTIES IN ASTHMATICS.

**INGESTION:** HARMFUL IF SWALLOWED. MAY CAUSE CHEMICAL BURNS TO MOUTH, THROAT AND STOMACH. INGESTION OF LARGE AMOUNTS MAY CAUSE NAUSEA, GASTROINTESTINAL UPSET AND ABDOMINAL PAIN. MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION, NAUSEA AND VOMITING, DIARRHEA AND VIOLENT COLIC.

**POTENTIAL CHRONIC HEALTH EFFECTS:**  
PROLONGED OR REPEATED EXPOSURE TO DILUTIONS CAN CAUSE DRYING, DEFATTING AND DERMATITIS. BREATHING OF FUMES MAY AGGRAVATE ACUTE OR CHRONIC ASTHMA AND CHRONIC PULMONARY DISEASES SUCH AS EMPHYSEMA AND BRONCHITIS.

**OTHER IMPORTANT HAZARDS:**  
THE PRODUCTS CAUSES BURNS OF THE EYES, SKIN AND MUCOUS MEMBRANES.

#### SECTION 4: FIRST AID MEASURES

**GENERAL:** SYMPTOMS MAY BE DELAYED.

**INHALATION:** IF SYMPTOMS DEVELOP MOVE VICTIM TO FRESH AIR. IF SYMPTOMS PERSIST, OBTAIN MEDICAL ATTENTION.

**SKIN CONTACT:** IMMEDIATELY FLUSH WITH COOL WATER FOR 20 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. DISCARD OR WASH WELL BEFORE REUSE. OBTAIN MEDICAL ATTENTION IF IRRITATION PERSISTS. DO NOT TRANSPORT UNLESS FLUSHING PERIOD IS COMPLETED OR CAN BE CONTINUED.

**EYE CONTACT:** IMMEDIATELY FLUSH WITH COOL WATER. REMOVE CONTACT LENSES, IF APPLICABLE, AND CONTINUE FLUSHING FOR 20 MINUTES. HOLD EYELIDS OPEN DURING FLUSHING. OBTAIN MEDICAL ATTENTION IMMEDIATELY. DO NOT TRANSPORT UNLESS FLUSHING PERIOD IS COMPLETED OR CAN BE CONTINUED.

**INGESTION:** DO NOT INDUCE VOMITING. RINSE MOUTH WITH WATER, THEN DRINK ONE OR TWO GLASSES OF WATER. OBTAIN MEDICAL ATTENTION. NEVER GIVE ANYTHING BY MOUTH IF VICTIM IS UNCONSCIOUS, OR IS CONVULSING.

**NOTES TO PHYSICIAN:**  
IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE (SHOW THE LABEL WHERE POSSIBLE). ENSURE THAT MEDICAL PERSONNEL ARE AWARE OF THE MATERIAL(S) INVOLVED, AND TAKE PRECAUTIONS TO PROTECT THEMSELVES. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE. AVOID CONTACT WITH EYES AND SKIN. WEAR IMPERVIOUS GLOVES AND CHEMICAL SPLASH GOGGLES. KEEP OUT OF REACH OF CHILDREN.

## SECTION 5: FIRE FIGHTING MEASURES

### FIRE HAZARDS/CONDITION OF FLAMMABILITY:

NOT FLAMMABLE BY WHMIS/OSHA CRITERIA.

**FLASH POINT:** NONE

**FLASH POINT METHOD:** N/AP.

**LOWER FLAMMABLE LIMIT:** N/AP.

(% BY VOL.)

**AUTO IGNITION TEMPERATURE:** N/AP.

**UPPER FLAMMABLE LIMIT:** N/AP.

(% BY VOL.)

**OXIDIZING PROPERTIES:** NONE KNOWN

**FLAME PROJECTION LENGTH:** N/AP.

**EXPLOSION DATA: SENSITIVITY TO MECHANICAL IMPACT/STATIC DISCHARGE:**

NOT AVAILABLE.

### SUITABLE EXTINGUISHING MEDIA:

TREAT FOR SURROUNDING MATERIAL. FOR SMALL FIRES USE DRY CHEMICAL OR CARBON DIOXIDE. FOR LARGE FIRES, FLOOD FIRE AREA WITH WATER. DO NOT GET SOLID STREAM OF WATER ON SPILLED MATERIAL.

### SPECIAL FIRE-FIGHTING PROCEDURES/EQUIPMENT:

FIREFIGHTERS SHOULD WEAR FULL PROTECTIVE CLOTHING INCLUDING SELF-CONTAINED BREATHING APPARATUS. EVACUATE RESIDENTS WHO ARE DOWNWIND OF FIRE. PREVENT UNAUTHORIZED ENTRY INTO FIRE AREA. DIKE AREA TO CONTAIN RUNOFF AND PREVENT CONTAMINATION OF WATER SOURCES. NEUTRALIZE RUNOFF WITH LIME, SODA ASH, OR OTHER SUITABLE NEUTRALIZING AGENTS. COOL CONTAINERS THAT ARE EXPOSED TO FLAME WITH STREAMS OF WATER UNTIL FIRE IS OUT.

### HAZARDOUS COMBUSTION PRODUCTS:

MAY INCLUDE AND ARE NOT LIMITED TO: SULPHUR DIOXIDE GAS.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### LEAK AND SPILL PROCEDURES:

KEEP UNNECESSARY PERSONNEL AWAY. DO NOT TOUCH OR WALK THROUGH SPILLED MATERIAL. DO NOT TOUCH DAMAGED CONTAINERS OR SPILLED MATERIAL UNLESS WEARING APPROPRIATE PROTECTIVE CLOTHING. KEEP PEOPLE AWAY FROM AND UPWIND OF SPILL/LEAK. STOP LEAK IF YOU CAN DO SO WITHOUT RISK. PREVENT ENTRY INTO WATERWAYS, SEWERS, BASEMENTS OR CONFINED AREAS. SHOULD NOT BE RELEASED INTO THE ENVIRONMENT. BEFORE ATTEMPTING CLEAN UP, REFER TO HAZARD DATA GIVEN ABOVE. SMALL SPILLS MAY BE ABSORBED WITH NON-REACTIVE ABSORBENT AND PLACED IN SUITABLE, COVERED, LABELLED CONTAINERS. PREVENT LARGE SPILLS FROM ENTERING SEWERS OR WATERWAYS. CONTACT EMERGENCY SERVICES AND SUPPLIER FOR ADVICE. NEVER RETURN SPILLS IN ORIGINAL CONTAINERS FOR RE-USE.

## SECTION 7: HANDLING AND STORAGE

### SAFE HANDLING PROCEDURES:

USE GOOD INDUSTRIAL HYGIENE PRACTICES IN HANDLING THIS MATERIAL. DO NOT GET THIS MATERIAL IN YOUR EYES, ON YOUR SKIN, OR ON YOUR CLOTHING. AVOID BREATHING VAPOURS OR MISTS OF THIS PRODUCT.

**STORAGE REQUIREMENTS:**

KEEP OUT OF REACH OF CHILDREN. STORE IN A TIGHTLY CLOSED CONTAINER IN A COOL, DRY AND DARK PLACE AWAY FROM INCOMPATIBLE MATERIALS.

**INCOMPATIBLE MATERIALS:**

STRONG OXIDIZING AGENTS. ACIDS.

<b>SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION</b>
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**EXPOSURE LIMITS**

INGREDIENTS	ACGIH TLV		OSHA PEL
	TWA	STEL	PEL
SODIUM BISULPHITE	5mg/m <sup>3</sup>	N/AV.	N/AV.

SEE COMPOSITION/INFORMATION ON INGREDIENTS, SECTION 2.

**ENGINEERING CONTROLS:**

USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION, OR OTHER ENGINEERING CONTROLS TO CONTROL AIRBORNE LEVELS BELOW RECOMMENDED EXPOSURE LIMITS.

**GLOVES/TYPE:**

IMPERVIOUS GLOVES SUCH AS NEOPRENE, NATURAL RUBBER OR PVC. CONFIRM WITH REPUTABLE SUPPLIER FIRST.

**RESPIRATORY/TYPE:**

IF AIRBORNE CONCENTRATIONS ARE ABOVE THE APPLICABLE EXPOSURE LIMITS, USE NIOSH APPROVED RESPIRATORY PROTECTION.

**EYE/TYPE:**

WEAR CHEMICAL GOGGLES AND FACE SHIELD. IF VAPOUR EXPOSURE CAUSES IRRITATION, USE FULL FACE RESPIRATOR. WEAR A FACE SHIELD WHICH ALLOWS USE OF CHEMICAL GOGGLES, OR A FULL FACE RESPIRATOR, TO PROTECT FACE AND EYES WHEN THERE IS A LIKELIHOOD OF SPLASHES.

**FOOTWEAR/TYPE:**

DEPEND ON OPERATION. DISPOSE OF CONTAMINATED FOOTWEAR.

**CLOTHING/TYPE:**

USE OF AN IMPERVIOUS APRON IS RECOMMENDED.

**OTHER/TYPE:**

EYE WASH FOUNTAIN AND SAFETY SHOWER MUST BE LOCATED IN IMMEDIATE WORK AREA. HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WHEN USING DO NOT EAT OR DRINK. WASH HANDS BEFORE BREAKS AND IMMEDIATELY AFTER HANDLING THIS PRODUCT.

<b>SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES</b>
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<b>PHYSICAL STATE:</b>	LIQUID	<b>APPEARANCE:</b>	CLEAR LIQUID
<b>ODOUR:</b>	SULFIDE	<b>ODOUR THRESHOLD:</b>	N/AV.
<b>PH:</b>	3.8 – 4.4	<b>BOILING POINT:</b>	104°C (219.2°F)
<b>SPECIFIC GRAVITY:</b>	1.33 @ 25°C	<b>MELTING/FREEZING POINT:</b>	6°C (42.8°F)
<b>COEFFICIENT OF WATER/OIL</b>		<b>SOLUBILITY IN WATER:</b>	COMPLETE
<b>DISTRIBUTION:</b>	N/AP.	<b>VAPOUR DENSITY (AIR=1):</b>	N/AV.
<b>EVAPOURATION RATE:</b>	N/AP.	<b>VAPOUR PRESSURE:</b>	N/AV.
<b>MOLECULAR WEIGHT:</b>	104.06		
<b>MOLECULAR FORMULA:</b>	NAHSO <sub>3</sub>		

<b>SECTION 10: REACTIVITY AND STABILITY DATA</b>
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**STABILITY AND REACTIVITY:**

STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

**CONDITIONS TO AVOID:**

DO NOT MIX WITH OTHER CHEMICALS. INCOMPATIBLE MATERIALS INCLUDE STRONG OXIDIZING AGENTS AND ACIDS. HIGH TEMPERATURES, SPARKS, OPEN FLAMES & ALL SOURCES OF IGNITION. TEMPERATURES AT OR NEAR BOILING POINT CAUSES EVOLUTION OF SULPHUR DIOXIDE. SULPHUR DIOXIDE WILL EVOLVE SLOWLY AT AMBIENT TEMPERATURES.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

MAY INCLUDE AND ARE NOT LIMITED TO: SULPHUR DIOXIDE GAS. HAZARDOUS POLYMERIZATION DOES NOT OCCUR.

<b>SECTION 11: TOXICOLOGICAL INFORMATION</b>
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<b>TOXICOLOGICAL DATA:</b>	REFER TO SECTION 2 FOR INDIVIDUAL INGREDIENT LD50'S AND LC50'S.
<b>CARCINOGENIC STATUS:</b>	ACGIH DOES NOT CLASSIFY SODDIUM BISULPHITE AS A HUMAN CARCINOGEN.
<b>REPRODUCTIVE EFFECTS:</b>	NON-HAZARDOUS BY WHMIS/OSHA CRITERIA.
<b>TERATOGENICITY:</b>	NON-HAZARDOUS BY WHMIS/OSHA CRITERIA.
<b>MUTAGENICITY:</b>	NON-HAZARDOUS BY WHMIS/OSHA CRITERIA.

**SENSITIZATION TO MATERIAL:**

MAY CAUSE SENSITIZATION BY INHALATION.

**SYNERGISTIC MATERIALS:** NONE KNOWN.

**MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:**

PROLONGED OR REPEATED EXPOSURE TO DILUTIONS CAN CAUSE DRYING,  
DEFATTING AND DERMATITIS.

**SECTION 12: ECOLOGICAL INFORMATION**

**ENVIRONMENTAL EFFECTS:**

HARMFUL TO AQUATIC LIFE.

**IMPORTANT ENVIRONMENTAL CHARACTERISTICS:**

COMPONENTS OF THIS PRODUCT HAVE BEEN IDENTIFIED AS HAVING POTENTIAL  
ENVIRONMENTAL CONCERNS.

**ECOTOXICOLOGICAL: HARMFUL TO AQUATIC LIFE:**

LC50/96HR/GAMBUSIA AFFINIS = 240mg/L (static)

EC50/48HR/DAPHNIA MAGNA = 119mg/L

**SECTION 13: DISPOSAL CONSIDERATIONS**

**HANDLING FOR DISPOSAL:** HANDLE WASTE ACCORDING TO RECOMMENDATIONS IN SECTION 7. USE ONLY  
WITH ADEQUATE VENTILATION. LOCAL EXHAUST VENTILATION MAY BE  
NECESSARY. EMPTY CONTAINERS RETAIN RESIDUE (LIQUID AND/OR VAPOUR) CAN  
BE DANGEROUS.

**METHOD OF DISPOSAL:** DISPOSE OF IN ACCORDANCE WITH FEDERAL, PROVICIAL AND LOCAL  
HAZARDOUS WASTE LAWS.

**SECTION 14: TRANSPORTATION INFORMATION**

**PROPER SHIPPING NAME:** BISULPHITES, AQUEOUS SOLUTION, N.O.S.

**TDG CLASSIFICATION:** CLASS 8, UN2693, PACKING GROUP III

**SECTION 15: REGULATORY INFORMATION**

**WHMIS CLASSIFICATION:** CLASS D – DIVISION 2A  
CLASS E – CORROSIVE MATERIAL

**SECTION 16: OTHER INFORMATION**

<b>LEGEND:</b>	ACGIH	AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
	CAS #	CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER
	EC	EFFECTIVE CONCENTRATION
	LC	LETHAL CONCENTRATION
	LD	LETHAL DOSE
	N/AP.	NOT APPLICABLE
	N/AV.	NOT AVAILABLE
	NIOSH	NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH
	NOS	NOT OTHERWISE SPECIFIED
	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
	PEL	PERMISSIBLE EXPOSURE LIMIT
	TDG	TRANSPORTATION OF DANGEROUS GOODS ACT/REGULATIONS
	TLV	THRESHOLD LIMIT VALUE
	TWA	TIME-WEIGHTED AVERAGE
	WHMIS	WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM

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**MSDS PREPARATION DATE:** (DD/MM/YYYY)  
01/06/2011

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