



KENCRO

CHEMICALS

SODIUM BICARBONATE

MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT IDENTIFIER: SODIUM BICARBONATE
PRODUCT USE: FOOD APPLICATIONS, NEUTRALIZATION, REFER TO TECHNICAL LITERATURE
CHEMICAL FAMILY: ALKALI
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)
SODIUM BICARBONATE	144-55-8	60 – 100	N/AV.	4220MG/KG (RAT) 3360MG/KG (MOUSE)

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
SLIGHTLY IRRITATING TO THE EYES, SKIN AND RESPIRATORY SYSTEM. AVOID CONTACT WITH EYES.
AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. USE ONLY WITH ADEQUATE VENTILATION.
KEEP CONTAINER TIGHTLY CLOSED AND SEALED UNTIL READY FOR USE.
WASH THOROUGHLY AFTER HANDLING.

SIGNS AND SYMPTOMS OF SHORT-TERM EXPOSURE:

SKIN CONTACT: SLIGHTLY IRRITATING TO THE SKIN, OVER-EXPOSURE MAY CAUSE REDNESS.
SKIN ABSORPTION: N/AV.
EYE CONTACT: SLIGHTLY IRRITATING TO THE EYES, OVER-EXPOSURE MAY CAUSE WATERING AND REDNESS.
INHALATION: SLIGHTLY IRRITATING TO THE RESPIRATORY SYSTEM. OVER-EXPOSURE MAY CAUSE RESPIRATORY TRACT IRRITATION AND COUGHING.
INGESTION: MAY CAUSE ABDOMINAL PAIN, NAUSEA AND VOMITING. LARGE DOSES MAY CAUSE ALKALOSIS.
POTENTIAL CHRONIC HEALTH EFFECTS:
NO KNOWN SIGNIFICANT EFFECTS OR CRITICAL HAZARDS.

SECTION 4: FIRST AID MEASURES

GENERAL: NO ACTION SHALL BE TAKEN INVOLVING ANY PERSONAL RISK OR WITHOUT SUITABLE TRAINING. IT MAY BE DANGEROUS TO THE PERSON PROVIDING AID TO GIVE MOUTH-TO-MOUTH RESUSCITATION.
INHALATION: MOVE EXPOSED PERSON TO FRESH AIR. IF NOT BREATHING, IF BREATHING IRREGULAR OR IF RESPIRATORY ARREST OCCURS, PROVIDE ARTIFICIAL RESPIRATION OR OXYGEN BY TRAINED PERSONNEL. LOOSEN TIGHT CLOTHING SUCH AS A COLLAR, TIE OR WAISTBAND. GET MEDICAL ATTENTION IMMEDIATELY.
SKIN CONTACT: IN CASE OF CONTACT, IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. WASH CLOTHING BEFORE REUSE. CLEAN SHOES THOROUGHLY BEFORE REUSE. GET MEDICAL ATTENTION IMMEDIATELY.

EYE CONTACT: CHECK FOR AND REMOVE ANY CONTACT LENSES. IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, OCCASIONALLY LIFTING THE UPPER AND LOWER EYELIDS. GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION: WASH OUT MOUTH WITH WATER. DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. LOOSEN TIGHT CLOTHING SUCH AS A COLLAR, TIE OR WAISTBAND. GET MEDICAL ATTENTION IMMEDIATELY.

NOTES TO PHYSICIAN:
NO SPECIFIC TREATMENT. TREAT SYMPTOMATICALLY. CONTACT POISON CONTROL SPECIALIST IMMEDIATELY IF LARGE QUANTITIES HAVE BEEN INGESTED OR INHALED.

SECTION 5: FIRE FIGHTING MEASURES

FIRE HAZARDS/CONDITION OF FLAMMABILITY:

NO SPECIFIC FIRE OR EXPLOSION HAZARD. THIS PRODUCT CAN BE USED AS A DRY POWDER EXTINGUISHING AGENT. INFLAMMABLE. PROMPTLY ISOLATE THE SCENE BY REMOVING ALL PERSONS FROM THE VICINITY OF THE INCIDENT IF THERE IS A FIRE. NO ACTION SHALL BE TAKEN INVOLVING ANY PERSONAL RISK OR WITHOUT SUITABLE TRAINING.

FLASH POINT: N/AP.

FLASH POINT METHOD: N/AP.

LOWER FLAMMABLE LIMIT: N/AP.

(% BY VOL.)

OXIDIZING PROPERTIES: N/AP.

FLAME PROJECTION LENGTH: N/AP.

AUTO IGNITION TEMPERATURE: N/AP.

UPPER FLAMMABLE LIMIT: N/AP.

(% BY VOL.)

EXPLOSION DATA: SENSITIVITY TO MECHANICAL IMPACT/STATIC DISCHARGE:

N/AV.

SUITABLE EXTINGUISHING MEDIA:

USE AN EXTINGUISHING AGENT SUITABLE FOR SURROUNDING FIRES. WEAR NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS WHEN EITHER IN CONFINED AREA OR EXPOSED TO COMBUSTION PRODUCTS.

SPECIAL FIRE-FIGHTING PROCEDURES/EQUIPMENT:

FIRE-FIGHTERS SHOULD WEAR APPROPRIATE PROTECTIVE EQUIPMENT AND SELF-CONTAINED BREATHING APPARATUS (SCBA) WITH FULL FACE-PIECE OPERATED IN POSITIVE PRESSURE MODE.

HAZARDOUS COMBUSTION PRODUCTS:

NO SPECIFIC DATA.

SECTION 6: ACCIDENTAL RELEASE MEASURES

LEAK AND SPILL PROCEDURES:

NO ACTION SHALL BE TAKEN INVOLVING ANY PERSONAL RISK OR WITHOUT SUITABLE TRAINING. EVACUATE SURROUNDING AREAS. KEEP UNNECESSARY AND UNPROTECTED PERSONNEL FROM ENTERING. DO NOT TOUCH OR WALK THROUGH SPILLED MATERIAL. PROVIDE ADEQUATE VENTILATION. AVOID DUST ACCUMULATION. SWEEP OR SHOVEL MATERIAL INTO WASTE CONTAINER. FINISH CLEANING BY SPREADING WATER ON THE CONTAMINATED SURFACE. WEAR APPROPRIATE RESPIRATOR WHEN VENTILATION IS INADEQUATE. PUT ON APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (SEE SECTION 8). MOVE CONTAINERS FROM SPILL AREA. VACUUM OR SWEEP UP MATERIAL AND PLACE IN A DESIGNATED, LABELED WASTE CONTAINER. DISPOSE VIA A LICENSED WASTE DISPOSAL CONTRACTOR.

SECTION 7: HANDLING AND STORAGE

SAFE HANDLING PROCEDURES:

PUT ON APPROPRIATE PERSONAL PROTECTING EQUIPMENT (SEE SECTION 8). EATING, DRINKING AND SMOKING SHOULD BE PROHIBITED IN AREAS WHERE THIS MATERIAL IS HANDLED, STORED AND PROCESSED. WORKERS SHOULD WASH HANDS AND FACE BEFORE EATING, DRINKING AND SMOKING. DO NOT INGEST. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. USE ONLY WITH ADEQUATE VENTILATION. WEAR APPROPRIATE RESPIRATOR WHEN VENTILATION IS INADEQUATE. KEEP IN THE ORIGINAL CONTAINER OR AN APPROVED ALTERNATIVE MADE FROM A COMPATIBLE MATERIAL, KEPT TIGHTLY CLOSED WHEN NOT IN USE. EMPTY CONTAINERS RETAIN PRODUCT RESIDUE AND CAN BE HAZARDOUS. DO NOT REUSE CONTAINER.

STORAGE REQUIREMENTS:

STORE IN ACCORDANCE WITH LOCAL REGULATIONS. STORE IN ORIGINAL CONTAINER PROTECTED FROM DIRECT SUNLIGHT IN A DRY, COOL AND WELL-VENTILATED AREA. AWAY FROM INCOMPATIBLE MATERIALS AND FOOD AND DRINK. KEEP CONTAINER TIGHTLY CLOSED AND SEALED UNTIL READY FOR USE. CONTAINERS THAT HAVE BEEN OPENED MUST

BE CAREFULLY RESEALED AND KEPT UPRIGHT TO PREVENT LEAKAGE. DO NOT STORE IN UNLABELED CONTAINERS. USE APPROPRIATE CONTAINMENT TO AVOID ENVIRONMENTAL CONTAMINATION.

INCOMPATIBLE MATERIALS:

REACTS WITH ALUMINUM, ACIDS AND PHOSPHOROUS PENTOXIDE.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE LIMITS

INGREDIENTS	ACGIH TLV		OSHA PEL	
	TWA	STEL	PEL	STEL
SODIUM BICARBONATE	N/AV.	N/AV.	N/AV.	N/AV.

NO EXPOSURE LIMIT VALUE KNOWN, CONSULT LOCAL AUTHORITIES FOR ACCEPTABLE EXPOSURE LIMITS. SEE COMPOSITION/INFORMATION ON INGREDIENTS, SECTION 2 FOR LD50 VALUE.

RECOMMENDED MONITORING:

IF THIS PRODUCT CONTAINS INGREDIENTS WITH EXPOSURE LIMITS, PERSONAL, WORKPLACE ATMOSPHERE OR BIOLOGICAL MONITORING MAY BE REQUIRED TO DETERMINE THE EFFECTIVENESS OF THE VENTILATION OR OTHER CONTROL MEASURES AND/OR NECESSITY TO USE RESPIRATORY PROTECTIVE EQUIPMENTS.

ENGINEERING CONTROLS:

USE ONLY WITH ADEQUATE VENTILATION. IF USER OPERATIONS GENERATE DUST, FUMES, GAS, VAPOUR OR MIST, USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION OR OTHER ENGINEERING CONTROLS TO KEEP WORKER EXPOSURE TO AIRBORNE CONTAMINATES BELOW ANY RECOMMENDED OR STATUTORY LIMITS.

HYGIENE MEASURES:

WASH HANDS, FOREARMS AND FACE THOROUGHLY AFTER HANDLING CHEMICAL PRODUCTS, BEFORE EATING, SMOKING AND USING THE LAVATORY AND AT THE END OF THE WORKING PERIOD. APPROPRIATE TECHNIQUES SHOULD BE USED TO REMOVE POTENTIALLY CONTAMINATED CLOTHING. WASH CONTAMINATED CLOTHING BEFORE REUSING. ENSURE THAT THE EYEWASH STATION AND SAFETY SHOWERS ARE CLOSE TO THE WORKSTATION LOCATION.

GLOVES/TYPE:

CHEMICAL RESISTANT, IMPERVIOUS GLOVES COMPLYING WITH AN APPROVED STANDARD SHOULD BE WORN AT ALL TIMES WHEN HANDLING CHEMICAL PRODUCTS IF A RISK ASSESSMENT INDICATES THIS IS NECESSARY.

RESPIRATORY/TYPE:

USE A PROPERLY FITTED, AIR-PURIFYING OR AIR-FED RESPIRATOR COMPLYING WITH AN APPROVED STANDARD IF A RISK ASSESSMENT INDICATES THIS IS NECESSARY. RESPIRATOR SELECTION MUST BE BASED ON KNOWN OR ANTICIPATED EXPOSURE LEVELS, THE HAZARDS OF THE PRODUCT AND THE SAFE WORKING LIMITS OF THE SELECTED RESPIRATOR.

EYE/TYPE:

SAFETY EYEWEAR COMPLYING WITH AN APPROVED STANDARD SHOULD BE USED WHEN A RISK ASSESSMENT INDICATES THIS IS NECESSARY TO AVOID EXPOSURE TO LIQUID SPLASHES, MISTS OR DUSTS. RECOMMENDED: SAFETY GLASSES WITH SIDE-SHIELDS.

FOOTWEAR/TYPE:

NO SPECIAL REQUIREMENTS.

CLOTHING/TYPE:

PERSONAL PROTECTIVE EQUIPMENT FOR THE BODY SHOULD BE SELECTED BASED ON THE TASK BEING PERFORMED AND THE RISKS INVOLVED AND SHOULD BE APPROVED BY A SPECIALIST BEFORE HANDLING THIS PRODUCT. RECOMMENDED: LAB COAT.

ENVIRONMENTAL EXPOSURE CONTROLS:

EMISSIONS FROM VENTILATION OR WORK PROCESS EQUIPMENT SHOULD BE CHECKED TO ENSURE THEY COMPLY WITH THE REQUIREMENTS OF ENVIRONMENTAL PROTECTION LEGISLATION. IN SOME CASES, FUME SCRUBBERS, FILTERS OR ENGINEERING MODIFICATION TO THE PROCESS EQUIPMENT WILL BE NECESSARY TO REDUCE EMISSIONS TO ACCEPTABLE LEVELS.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	SOLID (GRANULAR)	APPEARANCE:	WHITE
ODOUR:	ODOURLESS	ODOUR THRESHOLD:	N/AP.
PH:	8.2 – 8.5 (CONC. 1% W/W)	BOILING POINT:	DECOMPOSES
RELATIVE DENSITY:	2.16 (@ 4°C)	MELTING/FREEZING POINT:	DECOMPOSES
COEFFICIENT OF WATER/OIL		SOLUBILITY IN WATER:	PARTIALLY 8.8% @ 20°C
DISTRIBUTION:	N/AV.	VAPOUR DENSITY (AIR=1):	N/AP.
EVAPOURATION RATE:	N/AP.		

MOLECULAR WEIGHT: 84.01 G/MOLE
MOLECULAR FORMULA: NaHCO₃

SECTION 10: REACTIVITY AND STABILITY DATA

STABILITY AND REACTIVITY:

THIS PRODUCT IS STABLE. IN MOIST AIR FORMS SODIUM CARBONATE. UNDER NORMAL CONDITIONS OF STORAGE, HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

CONDITIONS TO AVOID: NO SPECIFIC DATA

MATERIALS TO AVOID: REACTS WITH ALUMINUM, ACIDS AND PHOSPHORUS PENTOXIDE.

HAZARDOUS DECOMPOSITION PRODUCTS:

UNDER NORMAL CONDITIONS OF STORAGE, HAZARDOUS DECOMPOSITION PRODUCTS SHOULD NOT BE PRODUCED.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA: REFER TO SECTION 2 FOR INDIVIDUAL INGREDIENT LD50'S.

CARCINOGENIC STATUS: NO KNOWN SIGNIFICANT EFFECTS OR CRITICAL HAZARDS.

REPRODUCTIVE EFFECTS: NO KNOWN SIGNIFICANT EFFECTS OR CRITICAL HAZARDS.

TERATOGENICITY: NO KNOWN SIGNIFICANT EFFECTS OR CRITICAL HAZARDS.

MUTAGENICITY: NO KNOWN SIGNIFICANT EFFECTS OR CRITICAL HAZARDS.

SENSITIZATION TO MATERIAL: N/AV.

SYNERGISTIC MATERIALS: N/AV.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:

NONE KNOWN

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS:

NO KNOWN SIGNIFICANT EFFECTS OR CRITICAL HAZARDS.

ENVIRONMENTAL PRECAUTIONS:

AVOID DISPERSAL OF SPILLED MATERIAL AND RUNOFF AND CONTACT WITH SOIL, WATERWAYS, DRAINS AND SEWERS. INFORM THE RELEVANT AUTHORITIES IF THE PRODUCT HAS CAUSED ENVIRONMENTAL POLLUTION (SEWERS, WATERWAYS, SOIL OR AIR).

SECTION 13: DISPOSAL CONSIDERATIONS

HANDLING FOR DISPOSAL: REFER TO SECTION 7: HANDLING AND STORAGE AND SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION FOR ADDITIONAL HANDLING INFORMATION AND PROTECTION OF EMPLOYEES.

WASTE DISPOSAL: THE GENERATION OF WASTE SHOULD BE AVOIDED OR MINIMIZED WHEREVER POSSIBLE. EMPTY CONTAINERS OR LINERS MAY RETAIN SOME PRODUCT RESIDUES. THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF IN A SAFE WAY. DISPOSE OF SURPLUS AND NON-RECYCLABLE PRODUCTS VIA A LICENSED WASTE DISPOSAL CONTRACTOR. DISPOSAL OF THIS PRODUCT, SOLUTIONS AND ANY BY-PRODUCTS SHOULD AT ALL TIMES COMPLY WITH THE REQUIREMENTS OF ENVIRONMENTAL PROTECTION AND WASTE DISPOSAL LEGISLATION AND ANY REGIONAL LOCAL AUTHORITY REQUIREMENTS. AVOID DISPERSAL OF SPILLED MATERIAL AND RUNOFF AND CONTACT WITH SOIL, WATERWAYS, DRAINS AND SEWERS.

WASTE AND EMPTY PACKAGING MUST BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, PROVINCIAL AND MUNICIPAL ENVIRONMENTAL CONTROL REGULATIONS.

SECTION 14: TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: SODIUM BICARBONATE

TDG CLASSIFICATION: NOT REGULATED

SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION: NOT CONTROLLED UNDER WHMIS (CANADA)

SECTION 16: OTHER INFORMATION

LEGEND:	ACGIH	AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
	CAS #	CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER
	LC	LETHAL CONCENTRATION
	LD	LETHAL DOSE
	N/AP.	NOT APPLICABLE
	N/AV.	NOT AVAILABLE
	NIOSH	NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH
	PEL	PERMISSIBLE EXPOSURE LIMIT
	SCBA	SELF CONTAINED BREATHING APPARATUS
	STEL	SHORT TERM 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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