



KENCRO

CHEMICALS

SODA ASH LIGHT

MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT IDENTIFIER: SODIUM CARBONATE
PRODUCT USE: 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 CARBONATE | 497-19-8 | 99.8 | 2.3MG/L (RAT, 2HR) | 4090MG/KG (RAT) |

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

MAY CAUSE SEVERE IRRITATION OF THE EYES, INCLUDING CORNEAL OPACITIES.
DUSTS AND MISTS ARE IRRITATING TO THE SKIN, MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

SIGNS AND SYMPTOMS OF SHORT-TERM EXPOSURE:

SKIN CONTACT: CONTINUOUS CONTACT MAY CAUSE SKIN IRRITATION (RED, DRY, CRACKED SKIN).
SKIN ABSORPTION: N/AV.
EYE CONTACT: DIRECT CONTACT WITH THE PRODUCT CAUSES IRRITATION OF THE EYES.
INHALATION: EXCESSIVE LEVELS OF AIRBORNE DUST MAY IRRITATE THE MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.
INGESTION: ALTHOUGH LOW IN TOXICITY, INGESTION CAN BE HARMFUL. MAY CAUSE NAUSEA, VOMITING, STOMACH ACHE AND DIARRHEA.
POTENTIAL CHRONIC HEALTH EFFECTS:
NO DATA AVAILABLE FOR THE PRODUCT

SECTION 4: FIRST AID MEASURES

INHALATION: REMOVE TO FRESH AIR. IF BREATHING DIFFICULTY OR DISCOMFORT OCCURS AND PERSISTS, CONTACT A MEDICAL DOCTOR.
SKIN CONTACT: WASH WITH PLENTY OF SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION OCCURS AND PERSISTS.
EYE CONTACT: IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES, LIFTING THE UPPER AND LOWER EYELIDS INTERMITTENTLY. SEE A MEDICAL DOCTOR OR OPHTHALMOLOGIST IMMEDIATELY.
INGESTION: RINSE MOUTH WITH WATER. DILUTE BY GIVING 1 OR 2 GLASSES OF WATER. DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. SEE A MEDICAL DOCTOR IMMEDIATELY.
NOTES TO PHYSICIAN:
WHILE INTERNAL TOXICITY IS LOW, IRRITANT EFFECTS OF HIGH CONCENTRATIONS MAY PRODUCE CORNEAL OPACITIES AND VESICULAR SKIN REACTIONS IN HUMANS WITH ABRADED SKIN ONLY. TREATMENT IS SYMPTOMATIC AND SUPPORTIVE.

SECTION 5: FIRE FIGHTING MEASURES

FIRE HAZARDS/CONDITION OF FLAMMABILITY:

NON-COMBUSTIBLE.

FLASH POINT: NON-COMBUSTIBLE

FLASH POINT METHOD: N/AP.

LOWER FLAMMABLE LIMIT: N/AP.

(% BY VOL.)

OXIDIZING PROPERTIES: N/AV.

FLAME PROJECTION LENGTH: N/AV.

EXPLOSION DATA: N/AV.

SENSITIVITY TO MECHANICAL IMPACT/STATIC DISCHARGE:

NOT EXPECTED TO BE SENSITIVE TO MECHANICAL IMPACT OR STATIC DISCHARGE.

SUITABLE EXTINGUISHING MEDIA:

WATER, WATER FOG, CO₂, DRY CHEMICAL.

SPECIAL FIRE-FIGHTING PROCEDURES/EQUIPMENT:

WEAR FULL PROTECTIVE CLOTHING AND SELF CONTAINED BREATHING APPARATUS.

HAZARDOUS COMBUSTION PRODUCTS:

HEATED TO DECOMPOSITION, IT EMITS FUMES OF SODIUM OXIDE.

SECTION 6: ACCIDENTAL RELEASE MEASURES

LEAK AND SPILL PROCEDURES:

REFER TO SECTION 8 "EXPOSURE CONTROLS/PERSONAL PROTECTION" FOR APPROPRIATE PERSONAL PROTECTION EQUIPMENT. SWEEP UP AND RECYCLE INTO PROCESS IF CONTAMINATION DOES NOT PRESENT A PROBLEM. USE APPROPRIATE PROTECTIVE EQUIPMENT IF DUST IS GENERATED OR CONTACT WITH EYES OR SKIN IS EXPECTED. FLUSH RESIDUES AND LIQUID TO HOLDING AREA FOR NEUTRALIZATION BEFORE DISCHARGE.

SECTION 7: HANDLING AND STORAGE

SAFE HANDLING PROCEDURES:

AVOID CONTACT WITH EYES, SKIN AND CLOTHING. AVOID BREATHING DUST OR MIST. USE APPROVED RESPIRATORY EQUIPMENT WHEN VENTILATION SYSTEMS ARE NOT AVAILABLE. SELECTION OF RESPIRATORS IS BASED ON THE DUST CLOUD GENERATED. MAINTAIN GOOD PERSONAL HYGIENE.

STORAGE REQUIREMENTS:

STORE IN A COOL DRY AREA, AWAY FROM ACIDS. STORE AWAY FROM INCOMPATIBLE MATERIALS. PROLONGED STORAGE MAY CAUSE PRODUCT TO CAKE AND BECOME WET FROM ATMOSPHERIC MOISTURE.

INCOMPATIBLE MATERIALS:

ALUMINUM POWDER, ACIDS, FLUORINE, MOLTEN LITHIUM. REACTS WITH ACIDS WITH RELEASE OF LARGE VOLUMES OF CARBON DIOXIDE GAS AND HEAT.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE LIMITS

| INGREDIENTS | OSHA PEL | MSHA PEL |
|------------------|--|----------------------------------|
| | TWA | TWA |
| SODIUM CARBONATE | 15mg/m ³ (TOTAL DUST) 5mg/m ³ (RASP FRACTION) | 10mg/m ³ (TOTAL DUST) |

SEE COMPOSITION/INFORMATION ON INGREDIENTS, SECTION 2.

ENGINEERING CONTROLS:

MINIMIZE EYE AND SKIN CONTACT BY USING APPROPRIATE PROTECTIVE EQUIPMENT. PROVIDE GENERAL MECHANICAL AND/OR LOCAL EXHAUST VENTILATION TO PREVENT RELEASE OF AIRBORNE DUST INTO WORK ENVIRONMENTS.

GLOVES/TYPE:

WEAR IMPERVIOUS GLOVES TO PREVENT SKIN CONTACT. THE OUTSIDE OF THE GLOVES SHOULD BE WASHED THOROUGHLY WITH SOAP AND WATER AFTER USE.

RESPIRATORY/TYPE:

WHENEVER DUST, IN THE WORKER'S BREATHING ZONE, CANNOT BE CONTROLLED WITH VENTILATION, WORKERS SHOULD WEAR RESPIRATORS, WHICH ARE APPROVED FOR PROTECTION AGAINST AIRBORNE DUST (BY U.S. NIOSH, MSHA OR COMPARABLE CERTIFICATION ORGANIZATION).

EYE/TYPE:

USE CUP TYPE CHEMICAL GOOGLES.

FOOTWEAR/TYPE:

INDUSTRIAL SAFETY SHOES.

CLOTHING/TYPE: WEAR ARM PROTECTORS AND APRONS. IF CLOTHING BECOMES CONTAMINATED, REMOVE AND LAUNDRER BEFORE REUSE.
OTHER/TYPE: AN EYE WASH STATION AND SAFETY SHOWER SHOULD BE MADE AVAILABLE IN THE IMMEDIATE WORKING AREA.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---------------------------------|---------------------------------|--------------------------------|---------------------|
| PHYSICAL STATE: | GRANULAR SOLID | APPEARANCE: | WHITE |
| ODOUR: | ODOURLESS | ODOUR THRESHOLD: | N/AP. |
| PH: | 11.4 (1% SOLUTION) | BOILING POINT: | DECOMPOSES |
| SPECIFIC GRAVITY: | 2.509 (WATER = 1) | MELTING/FREEZING POINT: | 851°C |
| COEFFICIENT OF WATER/OIL | | SOLUBILITY IN WATER: | 33.2% MAXIMUM (W/W) |
| DISTRIBUTION: | N/AP. | VAPOUR DENSITY (AIR=1): | N/AP. |
| EVAPOURATION RATE: | N/AP. | | |
| MOLECULAR WEIGHT: | 105.96 | | |
| MOLECULAR FORMULA: | Na ₂ CO ₃ | | |

SECTION 10: REACTIVITY AND STABILITY DATA

STABILITY AND REACTIVITY:
STABLE, NOT COMPATIBLE WITH ALUMINUM POWDER, ACIDS, FLUORINE, MOLTEN LITHIUM. MAY CORRODE FERROUS METALS AND MILD STEEL IN PRESENCE OF MOISTURE.

CONDITIONS TO AVOID:
CONTACT WITH ACIDS EXCEPT UNDER CONTROLLED CONDITIONS. REACTS WITH ACIDS WITH RELEASE OF LARGE VOLUMES OF CARBON DIOXIDE GAS AND HEAT. SIMULTANEOUS EXPOSURE TO SODA ASH AND LIME DUSTS (CaO). IN PRESENCE OF MOISTURE (IE. PERSPIRATION) THE TWO MATERIALS COMBINE TO FORM CORROSIVE CAUSTIC SODA WHICH MAY CAUSE BURNS.

HAZARDOUS DECOMPOSITION PRODUCTS:
NONE. HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA: EXPOSURE LIMIT OF MATERIAL:
PARTICULATES NOT OTHERWISE REGULATED: OSHA (PEL/TWA) 15 MG/M³ (TOTAL DUST), 5 MG/M³ (RASP FRACTION); MHTA (PEL/TWA) 10 MG/M³ (TOTAL DUST)
LC50 OF MATERIAL, SPECIES & ROUTE: 2.3MG/L (RAT 2HR), 24 HR LC50: 800 MG/M³, 20 HR EXPOSURE (GUINEA PIG) MODERATE TOXICITY
LD50 OF MATERIAL, SPECIES & ROUTE: LD50 (ORAL-RAT): 4090 MG/KG

CARCINOGENIC STATUS: NOT LISTED NY IARC, NTP, OSHA, ACGIH.

REPRODUCTIVE EFFECTS: N/AV.

TERATOGENICITY: N/AV.

MUTAGENICITY: N/AV.

SENSITIZATION TO MATERIAL:
NON-SENSITIZING (HUMANS, 0.25% SODIUM CARBONATE) [TOXICOL. APPL. PHARMACOL. 31:481 (1975)]

SYNERGISTIC MATERIALS:N/AV.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:
NO DATA AVAILABLE FOR THE PRODUCT.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS:
BIODEGRADABILITY DOES NOT APPLY TO INORGANIC SUBSTANCES, NO SIGNIFICANT TOXICITY TO AQUATIC ORGANISMS IS EXPECTED.

ECOTOXICITY: TOXICITY TO FISH:
DAPHNIA MAGNA 96 HR LC50 = 265 – 565 MG/L
BLUEGILL SUNFISH 96 HR LC50 = 300 – 320 MG/L

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: SALVAGE AS MUCH MATERIAL AS POSSIBLE AND RETURN TO PROCESS IF CONTAMINATION DOES NOT PRESENT A PROBLEM. DISPOSE IN AN ACCEPTED LANDFILL IN ACCORDANCE WITH LOCAL, PROVINCIAL AND FEDERALEAL GOVERNMENT REGULATIONS.

SECTION 14: TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: SODIUM CARBONATE
TDG CLASSIFICATION: NOT REGULATED

SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION: D2B (POISONOUS AND INFECTIOUS MATERIALS, TOXIC)

SECTION 16: OTHER INFORMATION

| | | |
|----------------|-------|---|
| LEGEND: | ACGIH | AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS |
| | CAS # | CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER |
| | IARC | INTERNATIONAL AGENCY FOR RESEARCH ON CANCER |
| | LC | LETHAL CONCENTRATION |
| | LD | LETHAL DOSE |
| | MSHA | MINE SAFETY AND HEALTH ADMINISTRATION |
| | N/AP. | NOT APPLICABLE |
| | N/AV. | NOT AVAILABLE |
| | NIOSH | NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH |
| | NTP | NATIONAL TOXICOLOGICAL PROGRAM |
| | OSHA | OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION |
| | PEL | PERMISSIBLE EXPOSURE LIMIT |
| | 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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