

FAXBACK DOC.#: 1145

A: LIQUIDE

MATERIAL SAFETY DATA SHEET

PRODUCT INFORMATION

PRODUCT: CARBIDE LIME; CALCIUM HYDROXIDE  
TRADE NAME: NONE  
CHEMICAL NAME: CALCIUM HYDROXIDE, SLAKED LIME  
SYNONYMS: LIME WATER, CALCIUM HYDRATE, HYDRATED LIME  
FORMULA: Ca(OH)2 IN H2O  
CHEMICAL FAMILY: ALKALINE EARTH METAL HYDRIDE (AQUEOUS SUSPENSION)  
MANUFACTURER'S NAME: CANADIAN LIQUID AIR LTD.  
MANUFACTURER'S ADDRESS: 1250 RENE-LEVESQUE BLVD. WEST  
MONTREAL (QUEBEC) CANADA H3B 5E6  
SUPPLIER'S NAME: CANADIAN LIQUID AIR LTD.  
SUPPLIER'S ADDRESS: 1250 RENE-LEVESQUE BLVD. WEST  
MONTREAL (QUEBEC) CANADA H3B 5E6  
EMERGENCY PHONE NUMBER: (514) 878-1667  
MOLECULAR WEIGHT: 74.10 (ANHYDROUS)  
PRODUCT USE: VARIOUS  
PRODUCT IDENTIFICATION NUMBER: NOT APPLICABLE

HAZARDOUS INGREDIENTS

CHEMICAL ID	CONCENTRATION	CAS #	LD(50)	LC(50)
CALCIUM HYDROXIDE	75	1305-62-0	ORAL-RAT 7340 MG/KG	NONE

PHYSICAL DATA

PHYSICAL STATE: AS A SLURRY, CARBIDE LIME IS MILKY GRAY IN COLOR  
APPEARANCE: SEE ABOVE

ODOR: ODORLESS

THRESHOLD: NOT APPLICABLE

SPECIFIC GRAVITY (H2O=1): 2.24

VAPOR PRESSURE: NOT APPLICABLE

VAPOR DENSITY (AIR=1): NOT APPLICABLE

EVAPORATION RATE: NOT APPLICABLE

BOILING POINT: NOT APPLICABLE

FREEZING POINT: NOT APPLICABLE

Flash: 12.4 @ 25 DEG. C

RELATIVE DENSITY: NOT APPLICABLE

DISTRIBUTION COEFFICIENT OF WATER/OIL: NOT APPLICABLE

CARBIDE LIME IS A WATER SUSPENSION OF CALCIUM HYDROXIDE WHICH IS A BY-PRODUCT OF THE PRODUCTION OF ACETYLENE BY MEANS OF THE CALCIUM CARBIDE PROCESS. THE MAIN PRODUCT IS APPROXIMATELY 11 = 12 % BY WEIGHT SOLIDS. THE CONCENTRATION OF SOLIDS INCREASES IN ACCORDANCE WITH THE FOLLOWING:

SPECIFIC COMPOSITION WT. %	AS GENERATED	SETTLED	POND DRIED	FILTERED
WATER	88%	75%	50%	40%
(OH)2	11.6	24.0	46.11	57.7
AVAILABLE (CaO)	(8.8)	(18.7)	(35.0)	(43.75)
CO3	0.15	0.43	1.65	1.05
SO2	0.13	0.35	0.73	0.66
SO3	0.06	0.12	1.33	0.30
(OH)2	0.03	0.05	0.08	0.15
FREE CARBON	0.03	0.05	0.10	0.14

**FIRE OR EXPLOSION HAZARD**

CONDITIONS OF FLAMMABILITY: NONFLAMMABLE LIQUID

MEANS OF EXTINCTION: NONFLAMMABLE LIQUID

FI POINT AND METHOD OF DETERMINATION: NONFLAMMABLE LIQUID

UPPER EXPLOSION LIMIT: NONFLAMMABLE LIQUID  
(% BY VOL)

LOWER EXPLOSION LIMIT: NONFLAMMABLE LIQUID  
(% BY VOL)

AUTO-IGNITION TEMPERATURE: NONFLAMMABLE LIQUID

FLAMMABILITY CLASSIFICATION: NONFLAMMABLE LIQUID

HAZARDOUS COMBUSTION PRODUCTS: NONFLAMMABLE LIQUID

EXPLOSION DATA: NONFLAMMABLE LIQUID

SENSITIVITY TO STATIC DISCHARGE: NONFLAMMABLE LIQUID

#### REACTIVITY DATA

CHEMICAL STABILITY: STABLE AS TO DECOMPOSITION

INCOMPATIBLE MATERIALS: REACTS WITH AND NEUTRALIZES ACIDS;  
CHLORINATED PHENOLS AND POTASSIUM NITRATE  
MAY FORM CHLORINATED BENZODIOXINS;  
EXPLOSIVE DECOMPOSITION WITH MALEIC  
ANHYDRIDE

CONDITIONS OF REACTIVITY: AMBIENT TEMPERATURES

HAZARDOUS DECOMPOSITION PRODUCTS: OXIDES OF CALCIUM

#### TOXICOLOGICAL PROPERTIES

ROUTES OF ENTRY:

SKIN CONTACT:

CONTACT WITH THE SKIN OF AN AQUEOUS SOLUTION OF CARBIDE LIME MAY CAUSE SEVERE BURNS TO THE SKIN MEMBRANES AND THE EYES AS WOULD ANY ALKALINE PRODUCT. DRYING OF THE AFFECTED TISSUES IS AN INDICATION OF EXPOSURE TO CARBIDE LIME TO THE EFFECTS OF CARBIDE LIME IS POSSIBLE.

ABSORPTION: NONE KNOWN

EYE: SEE SKIN CONTACT

**INHALATION:**

INHALATION OF FUMES FROM A SOLUTION OF CARBIDE LIME AND WATER MAY BE IRRITATING TO THE UPPER RESPIRATORY TRACT RESULTING IN COUGHING, CHOKING AND POSSIBLE BURST EXPOSURE IS UNINTERRUPTED.

INGESTION: NONE KNOWN

**ACUTE OVER EXPOSURE EFFECTS:**

IRITATIONS AND SEVERE IRRITATION TO THE EYES AND MUCOUS MEMBRANES ARE THE RESULT OF CONTINUED EXPOSURE OR CONTACT WITH ANY ALKALINE SOLUTION OR COMPOSITE.

CHRONIC OVER EXPOSURE EFFECTS: UNKNOWN

EXPOSURE LIMITS: NOT APPLICABLE

PERMEABILITY TO PRODUCT: SEE SKIN CONTACT

SENSITIZATION TO MATERIAL: NONE KNOWN

MUTAGENICITY, REPRODUCTIVE EFFECTS: NONE KNOWN

GENOTOXICITY, MUTAGENICITY: CYT-RAT-ASCITES TREMOR; 1200 MG/KG

PHYSIOLOGICALLY SYNERGISTIC PRODUCTS: NONE

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**PREVENTIVE MEASURES**

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**PERSONAL PROTECTIVE EQUIPMENT:**

WEAR RUBBER GLOVES AND BOOTS. SAFETY GOGGLES OR FACESHIELD. EYE WASH STATION AND SAFETY SHOWER. DUST MASK.

**ENGINEERING CONTROLS:**

USE MATERIALS COMPATIBLE WITH CHEMICALLY BASIC PRODUCTS ARE ACCEPTABLE FOR THE OPERATION AND HANDLING OF CALCIUM HYDROXIDE.

**LEAK AND SPILL PROCEDURES:**

KEEP UNNECESSARY PERSONNEL FROM AFFECTED AREA. WEAR APPROPRIATE PROTECTIVE EQUIPMENT. SWEEP AND PLACE INTO SUITABLE DRY CONTAINER FOR FUTURE RECLAMATION OR DISPOSAL IF IN A DRY STATE OR USE AN APPROPRIATE ABSORBANT MATERIAL (AVAILABLE COMMERCIALY) TO SURROUND AND CONTAIN SPILL IF IN A LIQUID STATE. DO NOT FLUSH SPILLED MATERIAL INTO THE SEWER SYSTEM. CONTACT THE CLOSEST CANADIAN LIQUID AIR LOCATION.

**WASTE DISPOSAL:**

DO NOT ATTEMPT TO DISPOSE OF WASTE OR UNUSED QUANTITIES. RETURN IN THE SHIPPING CONTAINER PROPERLY LABELED, TO CANADIAN LIQUID AIR FOR PROPER DISPOSAL. FOR EMERGENCY DISPOSAL, CONTACT THE CLOSEST CANADIAN LIQUID AIR LOCATION.

**HANDLING PROCEDURES AND EQUIPMENT:**

HANDLE ONLY IN WELL-VENTILATED AREAS. EXPOSURE TO CALCIUM HYDROXIDE SLURRY SHOULD BE LIMITED TO TRAINED, AUTHORISED PERSONNEL ONLY. AREAS WHERE CARBIDE LIME IS HANDLED SHOULD BE EQUIPPED WITH AN APPROVED AND EASILY ACCESSIBLE EYEWASH STATION AND SAFETY SHOWER.

STORAGE REQUIREMENTS:

STORE IN A COOL, DRY WELL VENTILATED AREA. ACCESS TO CARBIDE LIME SHOULD BE LIMITED TO AUTHORISED PERSONNEL. FOR ADDITIONAL INFORMATION SEE ALSO COMPRESSED GAS ASSOCIATION PAMPHLET G-1.5.

TDG CLASSIFICATION: NOT APPLICABLE

WHMIS CLASSIFICATION: E

SPECIAL SHIPPING INFORMATION: TRANSPORT UPRIGHT AND SECURED.

FIRST AID MEASURES

SPECIFIC FIRST AID PROCEDURES:

PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE TO CALCIUM HYDROXIDE

INHALATION:

CONSCIOUS PERSONS SHOULD BE ASSISTED TO AN UNCONTAMINATED AREA AND INHALE FRESH AIR. UNCONSCIOUS PERSONS SHOULD BE MOVED TO AN UNCONTAMINATED AREA AND GIVEN ASSISTED RESPIRATION AND SUPPLEMENTAL OXYGEN. KEEP THE VICTIM WARM AND QUIET. ASSURE THAT MUCOUS OR VOMITED MATERIAL DOES NOT OBSTRUCT THE AIRWAY BY POSITIONAL DRAINAGE.

EYE CONTACT:

PERSONS WITH POTENTIAL EXPOSURE TO CARBIDE LIME SHOULD NOT WEAR CONTACT LENSES.

FLUSH CONTAMINATED EYE(S) WITH COPIOUS QUANTITIES OF WATER. PART EYELIDS TO ASSURE COMPLETE FLUSHING. CONTINUE FOR A MINIMUM OF 15 MINUTES.

SKIN CONTACT:

FLUSH AFFECTED AREA WITH COPIOUS QUANTITIES OF WATER. REMOVE AFFECTED CLOTHING AS RAPIDLY AS POSSIBLE.

REMOVE CONTAMINATED CLOTHING AND FLUSH AFFECTED AREAS WITH LUKEWARM WATER. DO NOT USE HOT WATER. A PHYSICIAN SHOULD SEE THE PATIENT PROMPTLY IF EXPOSURE HAS RESULTED IN BLISTERING OF THE DERMAL SURFACE.

PREPARATION INFORMATION

PREPARED BY: SAFETY DEPARTMENT

DATE PREPARED: 12/08/96

LAST REVISION DATE: 06/01/96

FOR INFORMATION OR MSDS, CONTACT YOUR LOCAL C.L.A. OFFICE OR DISTRIBUTOR:

CUSTOMER CENTRE LOCATIONS.

NEWFOUNDLAND

ST. JOHNS

TEL: 709 722-5710

FAX: 709-722-2576

NOVA SCOTIA	DARTMOUTH	TEL:902 468-5152	FAX: 902-468-5782
NEW BRUNSWICK	MONCTON	TEL:506 857-3280	FAX: 506 857-9734
QUEBEC	SAINTE-FOY	TEL:418 683-1917	FAX: 418-683-7088
REAL	ANJOU	TEL:514 356-7600	FAX: 514 351-0531
RIVIERE DU QUEBEC	BOUCHERVILLE	TEL:514 449-7018	FAX: 514 449-7621
TORONTO	BRAMALEA	TEL:905 793-2000	FAX: 905 793-9257
EASTERN ONTARIO	OSHAWA	TEL:905 576-1860	FAX: 905 571-3779
MILTON	HAMILTON	TEL:905 547-2786	FAX: 905 547-7253
LONDON	LONDON	TEL:519 455-3990	FAX: 519 455-3828
SOUTHERN ONTARIO	SUDBURY	TEL:705 674-7777	FAX: 705 674-0517
MANITOBA & N.W. ONT.	WINNIPEG	TEL:204 989-9353	FAX: 204 694-0752
ALBERTA	SASKATOON	TEL:306 933-2722	FAX: 306 931-6641
CALGARY	CALGARY	TEL:403 777-4700	FAX: 403 777-4727
EDMONTON	EDMONTON	TEL:403 438-5600	FAX: 403 438-2801
VANCOUVER	VANCOUVER	TEL:604 606-4300	FAX: 604 606-4246
VANCOUVER ISLAND	NANAIMO	TEL:604 758-1761	FAX: 604 758-1911
PRINCE GEORGE	PENTICTON	TEL:604 492-4136	FAX: 604 493-8233

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