AUG 06 1993

MATERIAL SAFETY DATA SHEET (M S D S) Printed: 02/05/92 For Oils, Greases and Related Lubricating Materials

Revised : 07/31/91

SECTION I - PRODUCT INDENTIFICATION

Manufacturer: ALEMITE CD-2 COMPANY Information Phone: 708-391-1314
799 Biermann Court Emergency Phone: 708-391-1314
Mt. Prospect, IL 60056 CHEMTREC Phone: 800-424-9300

Trade Name : ALEMITE CD-2 GENERAL PURPOSE WHITE LITHIUM GREASE

Product Class: GREASE

! Hazard Ratings: Health - 1 ! none -> extreme Fire - 1

! 0 ---> 4 Reactivity - 0

Product Code : 5376B-215

C.A.S. Number: COMPLEX MIXTURE

Personal Protection - B

SECTION II - HAZARDOUS INGREDIENTS

Ingredients

CAS #

Weight --- Exposure Limits ---- VP % ACGIH/TLV OSHA/PEL mm HG

PETROLEUM HYDROCARBON 64742-62-7 20-50 5 mg/M3 5 mg/M30

STEL= 10

THE IMMEDIATELY ABOVE PETROLEUM HYROCARBON COMPONENT CONTAINS < 30 PPM TOLUENE (CAS# 108-88-3) WHICH IS LISTED BY THE CALIFORNIA SAFE WATER AND TOXIC ENFORCEMENT ACT KNOWN AS PROPOSITION 65.

PETROLEUM HYDROCARBON 64742-52-5 50-75 5 mg/M3 5 mg/M30 STEL= 10 10

LITHIUM TALLOWATE 64755-02-08 5-20 Undetermined STEL= NONE NONE N/AV

*BARIUM&ZINC COMPOUND PROPRIETARY 5-20 Undetermined

N/AP

SARA

*** ALL Ingredients in this product are listed in the T.S.C.A. Inventory.

THE WORD SARA DIRECTLY UNDER AN INGREDIENT IN THIS SECTION MEANS THAT IT IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT.

SARA 313 - THIS INGREDIENT CONTAINS 70% BARIUM COMPOUND; AS BA = 41.5% AND 30% ZINC COMPOUND; AS ZN = 19.5%.

SARA 311 CATEGORY - HEALTH HAZARD IMMEDIATE.

SARA 313 - CONTAINS INORGANIC BARIUM/ZINC COMPOUND WHICH REQUIRES REPORTING UNDER SARA 313. READ FURTHER IN SECTION II FOR ADDITIONAL INFORMATION.

INGREDIENTS ARE PROPRIETARY. POTENTIAL HAZARDS HAVE BEEN EVALUATED AND PERTINENT INFORMATION HAS BEEN INCLUDED IN SECTIONS III-IX. EACH PROPRIETARY MATERIAL IS EITHER: 1. HELD A TRADE SECRET FROM CATO, 2. OSHA-NON-HAZARDOUS OR BELOW 1% IF OSHA HAZARDOUS AND 3. BELOW 0.1% IF POTENTIALLY CARCINOGENIC.

SUMMARY OF HAZARDS - WARNING: CONTAINS PETROLEUM HYDROCARBON LUBRICANT AND BARIUM/ZINC COMPOUND. (cont.)

Page:

M S D S for: ALEMITE CD-2 GENERAL PURPOSE WHITE LITHIUM GREASE

SECTION II - HAZARDOUS INGREDIENTS (cont.)

-OTHER PRECAUTIONS: (cont.)

MAY BE HARMFUL IF INHALED OR SWALLOWED.

USE ONLY WITH ADEQUATE VENTILATION. IF INGESTED, DO NOT

INDUCE VOMITING; CONTACT A PHYSICIAN.

KEEP OUT OF REACH OF CHILDREN

* -> These items are listed on the SARA TITLE III Section 313 inventory

SECTION III - PHYSICAL DATA

Boiling Range: N/A Deg. F Vapor Density: Heavier than Air. Evap. Rate: Slower than n-Butyl Acetate
Volatiles volume: N/AV % Wgt per gallon: 7.62 Pounds.

Spec. Gravity: 0.91

Appearance: AMBER GREASE

V.O.C.: N/AV

SECTION IV - FIRE AND EXPLOSION HAZARD DATA ______

Flammability Class: 1 Flash Point: N/A

LEL: N/AV

-EXTINGUISHING MEDIA:

CARBON DIOXIDE, DRY CHEMICAL OR FOAM.

-SPECIAL FIREFIGHTING PROCEDURES:

WATER STREAM MAY SPREAD FIRE, USE WATER SPRAY ONLY TO COOL CONTAINERS NOT ON FIRE.

-UNUSUAL FIRE & EXPLOSION HAZARDS:

WILL NOT FLASH SPONTANEOUSLY. MAY IGNITE IF EXPOSED TO OPEN

THE BARIUM & ZINC COMPOUND COMPONENT OF THIS PRODUCT MAY EVOLVE OXIDES OF SULFUR OR HYDROGEN SULFIDE IF INVOLVED IN A FIRE.

. SECTION V - HEALTH HAZARD DATA

-PERMISSIBLE EXPOSURE LEVEL:

TWA = 5 MG/M3; STEL = 10 MG/M3--AS OIL MIST--RESPIRATORY IRRITANT. SEE SECTION II FOR CONCISE INFORMATION CONCERNING INGREDIENTS HAVING A PEL.

-EFFECTS OF OVEREXPOSURE:

INHALALATION: NOT EXPECTED TO BE ACUTELY TOXIC BY INHALATION IF RECOMMENDED EXPOSURE LEVELS ARE NOT EXCEEDED. BREATHING PETROLEUM OIL MIST AT CONCENTRATIONS IN AIR THAT EXCEED THE RECOMMENDED EXPOSURE STANDARD CAN CAUSE RESPIRATORY IRRITATION OF DISCOMFORT.

SKIN: UNDER NORMAL CONDITIONS OF USE, EXPECTED TO CAUSE NO MORE THAN MINOR SKIN IRRITATION WITH PROLONGED OR REPEATED CONTACT. PRIMARY HAZARD ASSOCIATED WITH GREASE IN HIGH PRESSURE GUN. IF INJECTED UNDER SKIN NECROSIS COULD RESULT.

EYES: UNDER NORMAL CONDITIONS OF USE, EXPECTED TO CAUSE NO MORE THAN MINOR, IF ANY, EYE IRRITATION BASED ON DATA FROM COMPONENTS.

(cont.)

Page: 3

M S D S for: ALEMITE CD-2 GENERAL PURPOSE WHITE LITHIUM GREASE

SECTION V - HEALTH HAZARD DATA (cont.) _____

-EFFECTS OF OVEREXPOSURE: (cont.)

SWALLOWING/ INGESTION: MAY CAUSE IRRITATION, NAUSEA OR DIARRHEA. POSSIBLE ASPIRATION HAZARD.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE KNOWN, BUT MAY AGGRAVATE PREVIOUSLY EXISTING SKIN DISORDERS. LISTED AS A POTENTIAL CARCINOGEN OR CARCINOGEN? NOT LISTED BY IARC, NTP, OR OSHA.

-FIRST AID:

INHALATION: IF RESPIRATORY DISCOMFORT OF IRRITATION OCCURES MOVE PERSON TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION AND GET MEDICAL ATTENTION IMMEDIATELY.

SKIN: WASH EXPOSED PORTION WITH SOAP AND WATER. LAUNDER SOILED CLOTHES BEFORE REUSE. IF INJECTED UNDER SKIN GET MEDICAL ATTENTION IMMEDIATELY.

EYES: IMMEDIATELY FLUSH EYES WITH WATER FOR A MIMIMIUM OF 15 MINUTES OCCASIONALLY LIFTING THE LOWER AND UPPER LIDS. IF FILM OR IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

SWALLOWING/ INGESTION: DO NOT INDUCE VOMITING; CONTACT A PHYSICIAN.

SECTION VI - REACTIVITY DATA

STABLITY: [] Unstable [x] Stable
HAZARDOUS POLYMERIZATION: [] May occur [x] Will not occur

-INCOMPATIBILITY

STRONG OXIDIZERS.

DUE TO THE PROPERTIES OF THE BARIUM & ZINC COMPOUND COMPONENT OF THIS PRODUCT ONE SHOULD AVOID CONTACT OF THIS PRODUCT WITH STRONG ACIDS.

-CONDITIONS TO AVOID:

AVOID CONDITIONS THAT COULD GENERATE AN OIL MIST. DO NOT EXPOSE THE PRODUCT TO STRONG OXIDIZERS OR EXCESSIVE HEAT.

-HAZARDOUS DECOMPOSITION PRODUCTS:

INCOMPLETE COMBUSTION CAN YEILD CARBON (SMOKE), CARBON MONOXIDED, VARIOUS HYDROCARBONS AND EVOLVE OTHER TOXIC GASES OR VAPORS. BURNING YEILDS ALKALINE EARTH OXIDE/OXIDES AND SPECIFICALLY ZINC AND BARIUM OXIDES. ON COMBUSTION HYDROGEN SULFIDE AND OR SULFUR OXIDES MAY BE RELEASED FROM THE BARIUM & ZINC COMPOUND COMPONENT OF THIS PRODUCT; ALSO INORGANIC ZINC AND BARIUM COMPOUNDS

WILL BE FORMED WHICH MAY SUBLIME (BE DISPERSED IN THE AIR).

Page: 4

M S D S for: ALEMITE CD-2 GENERAL PURPOSE WHITE LITHIUM GREASE

SECTION VII - SPILL OR LEAK PROCEEDURES

-STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED PICK UP AND PLACE IN CONTAINER FOR DISPOSAL.

-WASTE DISPOSAL METHOD:

EPA HAZARDOUS WASTE? NOT KNOWN, CHECK BY TCLP FOR BARUIM.
EPA HAZARDOUS WASTE CODE NUMBER--IF POSITIVE FOR BARIUM BY TCLP,
THEN D005.

EPA WASTE CHARATERISTIC OR HAZARD CODE--IF POSITIVE FOR BARIUM
BY TCLP, THEN EP TOX BY
TCLP.

UTILIZE LICENSED WASTE DISPOSAL COMPANY. CONSIDER RECYCLING OR CONTROLLED INCINERATION. UTILIZE PERMITTED INDUSTRIAL WASTE DISPOSAL SITE. FOLLOW ALL LOCAL, STATE AND FEDERAL GUIDELINES.

SECTION VIII - SPECIAL PROTECTION INFORMATION:

-RESPIRATORY PROTECTION:

UP TO 25 MG/M3, HALF-MASK ORGANIC VAPOR RESPIRATOR. UP TO 50 MG/M3, FULL-FACE ORGANIC VAPOR RESPIRATOR OR FULL-FACE SELF-CONTAINED RESPIRATOR. GREATER THAN 50 MG/M3, FIRE FIGHTING OR UNKNOWN CONCENTRATION, USE SELF CONTAINED BREATHING APPARATUS WITH POSSITIVE PRESSURE.

-VENTILATION:

MAINTAIN LOCAL OR DILUTION VENTILATION TO KEEP AIR CONCENTRATION BELOW TLV/PEL. REQUEST ASSISTANCE OF SAFETY AND INDUSTRIAL HYGIENE PERSONNEL TO DETERMINE AIR CONCENTRATION.

-PROTECTIVE GLOVES:

FOR PROLONGED OR REPEATED CONTACT USE NITRILE OR NEOPRENE GLOVES OR OTHER MATERIAL RESISTANT TO PETROLEUM OILS.

-EYE PROTECTION:

SAFETY GLASSES, CHEMICAL GOGGLES OR FACE SHIELD AS APPROPRIATE FOR EXPOSURE.

-OTHER PROTECTIVE EQUIPMENT:

NONE NORMALLY REQUIRED.

SECTION IX — SPECIAL PRECAUTIONS

-PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

STORE CLEAN, DRY, BELOW 120'F (50'C) TO PRESERVE FOR INTENDED USE. DO NOT STORE WITH STRONG OXIDIZERS.

-OTHER PRECAUTIONS:

DOT HAZARDOUS MATERIAL? NO

DOT SHIPPING NAME AND NUMBER - NOT APPLICABLE

DOT HAZARD CLASS - NOT APPLICABLE

DISCLAIMER

THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS PUBLICATION HAVE BEEN COMPILED FROM SOURCES BELIEVED TO BE RELIABLE AND TO REPRESENT THE BEST CURRENT OPINION ON (cont.)

M S D S for: ALEMITE CD-2 GENERAL PURPOSE WHITE LITHIUM GREASE

SECTION IX - SPECIAL PRECAUTIONS (cont.)

-OTHER PRECAUTIONS: (cont.)

THE SUBJECT AT THE TIME OF PUBLICATION. SINCE WE CANNOT ANTICIPATE OR CONTROL THE MANY DIFFERENT CONDITIONS UNDER WHICH THIS INFORMATION OR OUR PRODUCTS MAY BE USED, WE MAKE NO GUARANTEE THAT THE RECOMMENDATIONS WILL BE ADEQUATE FOR ALL INDIVIDUALS OR SITUATIONS. EACH USER OF THE PRODUCT DESCRIBED HEREIN SHOULD DETERMINE THE SUITABILITY OF THE DESCRIBED PRODUCT FOR HIS PARTICULAR PURPOSE AND SHOULD COMPLY WITH ALL FEDERAL, STATE AND LOCAL RULES AND REGULATIONS CONCERNING THE DESCRIBED PRODUCT.

ABBREVIATIONS:

N/A N/K N/AV	NOT APPLICABLE NOT KNOWN NOT AVAILABLE		PEL TWA TLV	TIME WEIGH	E EXPOSURE LIMIT TED AVERAGE IMIT VALUE	
COC	CLEVELAND OPEN			SHORT TERM	EXPOSURE LIMIT	
PMCC	PENSKI-MARTENS	CLOSED CU	JP			
G	GRAM	DOT DEPA	RTMEN	T OF TRANS	PORTATION	
MG	MILLIGRAM	OSHA OCCU	PATIC	NAL SAFETY	& HEALTH ADMIN.	
MЗ	CUBIC METER	SARA SUPE	RFUND	AMEND &	REAUTHORTS ACT	
LD 50	LETHAL DOSE 50%	;	0112		MERIOTHONIE. ACT	
LC 50	LETHAL CONCENTRATION 50%					
EPA	ENVIRONMENTAL PROTECTION AGENCY					
SAE		ETY OF AUTOMOTIVE ENGINEERS				
ISO	INTERNATIONAL STANDARDS ORGANIZATION					