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**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**  
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PRODUCT NAME : 4505 WHITE LITHIUM GREASE (SPRAY)  
 IDENTIFICATION NUMBER: DATE PRINTED: 04/23/01  
 PRODUCT USE/CLASS : LITHIUM GREASE

SUPPLIER: INTERNATIONAL EPOXIES AND SEALERS  
 30241 COMMERCE DRIVE  
 SAN ANTONIO, FL 33576

MANUFACTURER: INTERNATIONAL EPOXIES AND SEALERS  
 30241 COMMERCE DRIVE  
 SAN ANTONIO, FL 33576

24 HOUR EMERGENCY PHONE (INFOTRAC) 800-535-5053  
 INFORMATION TELEPHONE: 800-451-7206

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**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**  
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ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT % LESS THAN
01	N-HEXANE	110-54-3	65.0 %
02	PROPANE/ISOBUTANE/N-BUTANE	68476-86-8	15.0 %
03	ZINC OXIDE	1314-13-2	5.0 %

ITEM	ACGIH		OSHA		COMPANY	
	TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING	TLV-TWA	SKIN
01	50 PPM	N.E.	50 PPM	500 PPM	N.E.	YES
02	800 PPM	N.E.	800 PPM	N.E.	N.E.	YES
03	10 MG/M3	N.E.	15 MG/M3	N.E.	N.E.	NO

(See Section 16 for abbreviation legend)

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**SECTION 3 - HAZARDS IDENTIFICATION**  
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\*\*\* EMERGENCY OVERVIEW \*\*\*: Vapors irritating to eyes and respiratory tract. Vapors may cause flash fire or explosion.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.

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**SECTION 3 - HAZARDS IDENTIFICATION**  
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EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

EFFECTS OF OVEREXPOSURE - INHALATION: Headaches, dizziness, nausea,

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decreased blood pressure, changes in heart rate and cyanosis may result from over-exposure to vapor or skin exposure. Prolonged inhalation may be harmful.

EFFECTS OF OVEREXPOSURE - INGESTION: This material may be harmful or fatal if swallowed. Corrosive and may cause severe and permanent damage to mouth, throat and stomach.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Overexposure may cause nervous system damage. Overexposure may cause lung damage. Overexposure may cause kidney damage.

PRIMARY ROUTE(S) OF ENTRY: INHALATION SKIN ABSORPTION SKIN CONTACT EYE CONTACT INGESTION

SECTION 4 - FIRST AID MEASURES

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

FIRST AID - SKIN CONTACT: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

FIRST AID - INGESTION: Get medical attention immediately. If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: -156 F LOWER EXPLOSIVE LIMIT: 1.0 %
(SETAFLASH CLOSED CUP) UPPER EXPLOSIVE LIMIT: 9.5 %

AUTOIGNITION TEMPERATURE: ND

EXTINGUISHING MEDIA: WATER FOG DRY CHEMICAL CO2 FOAM

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors can travel to a source of ignition and flash back. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE,

SECTION 5 - FIRE FIGHTING MEASURES

SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

SPECIAL FIREFIGHTING PROCEDURES: Containers can build up pressure if

exposed to heat (fire). As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

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**SECTION 6 - ACCIDENTAL RELEASE MEASURES**  
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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

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**SECTION 7 - HANDLING AND STORAGE**  
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HANDLING: Wash thoroughly after handling.

STORAGE: Keep away from heat, sparks and flame. Keep from freezing.

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**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**  
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ENGINEERING CONTROLS: Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

RESPIRATORY PROTECTION: A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION: Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

EYE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield.

OTHER PROTECTIVE EQUIPMENT: STANDARD INDUSTRIAL CLOTHING STANDARDS SHOULD BE FOLLOWED.

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**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**  
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HYGIENIC PRACTICES: Wash hands before eating. Remove contaminated clothing and wash before reuse. Use only in a well ventilated area. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Avoid prolonged or repeated contact with skin. Avoid breathing vapors from heated material. Avoid contact with eyes, skin, and clothing.

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**  
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BOILING RANGE : -43 - 159 F VAPOR DENSITY : Is heavier than air  
 ODOR : SOLVENT ODOR THRESHOLD : ND  
 APPEARANCE : WHITE EVAPORATION RATE: Is faster than Butyl  
 SOLUBILITY IN H2O : NEGLIGIBLE Acetate  
 FREEZE POINT : 32 SPECIFIC GRAVITY: 0.7024  
 VAPOR PRESSURE : 80-90 pH @ 0.0 % : NA  
 PHYSICAL STATE : LIQUID VISCOSITY : NA  
 COEFFICIENT OF WATER/OIL DISTRIBUTION: NEGLIGIBLE

(See Section 16 for abbreviation legend)

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**SECTION 10 - STABILITY AND REACTIVITY**  
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CONDITIONS TO AVOID: ALL SOURCES OF IGNITION, WELDING ARCS, AND OPEN FLAMES.

INCOMPATIBILITY: STRONG ACIDS, ALKALIS, OXIDIZERS, AND AMINES.

HAZARDOUS DECOMPOSITION PRODUCTS: OXIDES OF CARBON, OXIDES OF NITROGEN, AND MAY PRODUCE FORMS OF CHLORIDE, CHLORINE, AND PHOSGENE.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

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**SECTION 11 - TOXICOLOGICAL PROPERTIES**  
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PRODUCT LD50: 48 mg/kg PRODUCT LC50: 28 ppm

COMPONENT TOXICOLOGICAL INFORMATION:

----- CHEMICAL NAME -----	----- LD50 -----	----- LC50 -----
N-HEXANE	48,000 PPM/4H/RAT	28,710 MG/KG RAT
HYDROTREATED, SEVERE, LT. NAPHTHENIC DI	NE	NE
PROPANE/ISOBUTANE/N-BUTANE	NE	57 PPH/15M/RAT
WHITE LITHIUM GREASE	NE	NE
ZINC OXIDE	>8437 MG/KG RAT	2500 MG/M3 MOUSE

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**SECTION 12 - ECOLOGICAL INFORMATION**  
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ECOLOGICAL INFORMATION: No Information.

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**SECTION 13 - DISPOSAL CONSIDERATIONS**  
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DISPOSAL METHOD: DISPOSE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

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**SECTION 14 - TRANSPORTATION INFORMATION**  
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DOT PROPER SHIPPING NAME: AEROSOL - CONSUMER COMMODITY

DOT TECHNICAL NAME: ORM-D

DOT HAZARD CLASS: 2.1

HAZARD SUBCLASS: NA

DOT UN/NA NUMBER: UN1950

PACKING GROUP: NA

RESP. GUIDE PAGE: 126

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**SECTION 15 - REGULATORY INFORMATION**  
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U.S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA - SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD    CHRONIC HEALTH HAZARD    FIRE HAZARD    REACTION  
 HAZARD    PRESSURIZED GAS HAZARD

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

----- CHEMICAL NAME -----	CAS NUMBER	WT/WT %	IS LESS THAN
N-HEXANE	110-54-3		65.0 %
ZINC OXIDE	1314-13-2		5.0 %

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

----- CHEMICAL NAME -----                      CAS NUMBER  
 No information is available.

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**SECTION 15 - REGULATORY INFORMATION**  
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U.S. STATE REGULATIONS: AS FOLLOWS -

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product:

----- CHEMICAL NAME -----	CAS NUMBER
HYDROTREATED, SEVERE, LT. NAPHTHENIC DIST.	64742-53-6
WHITE LITHIUM GREASE	MIXTURE

PENNSYLVANIA RIGHT-TO-KNOW:

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The following non-hazardous ingredients are present in the product at greater than 3%:

----- CHEMICAL NAME -----	CAS NUMBER
HYDROTREATED, SEVERE, LT. NAPHTHENIC DIST.	64742-53-6

CALIFORNIA PROPOSITION 65:

WARNING: The chemical(s) noted below and contained in this product, are known to the state of California to cause cancer, birth defects or other reproductive harm:

----- CHEMICAL NAME -----	CAS NUMBER
No Proposition 65 chemicals exist in this product.	

INTERNATIONAL REGULATIONS: AS FOLLOWS -

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: No information available.

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**SECTION 16 - OTHER INFORMATION**

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HMIS RATINGS - HEALTH: 1      FLAMMABILITY: 4      REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 04/23/01

REASON FOR REVISION: NEW FORMAT

VOLATILE ORGANIC COMPOUNDS (VOCS): 4.43 lbs/gal,    531 grams/ltr

LEGEND: N.A. - Not Applicable, N.E. - Not Established,  
N.D. - Not Determined

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The information contained on this MSDS is been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.