

SAFETY DATA SHEET.

Issuing date 13-Mar-2015

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Version 7

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name 4505 WHITE LITHIUM GREASE

Recommended use of the chemical and restrictions on use

Product code 4505

Product Type Extremely flammable aerosol
Synonyms None

Supplier's details

Recommended Use Lubricant.
Uses advised against No information available

Manufacturer:
International Epoxies & Sealers
P.O. Box 185
San Antonio, FL 33576

Emergency telephone number
Chemical Emergency Phone Number INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)
Emergency telephone INTERNATIONAL EPOXIES & SEALERS 1-800-451-7206

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Germ Cell Mutagenicity	Category 1B
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 1
Flammable aerosols	Category 1
Gases under pressure	Compressed Gas

GHS Label elements, including precautionary statements

Emergency Overview

DANGER

Hazard Statements

Causes skin irritation
 May cause genetic defects
 Suspected of causing cancer
 May cause respiratory irritation. May cause drowsiness or dizziness
 May be fatal if swallowed and enters airways
 Extremely flammable aerosol
 Contains gas under pressure; may explode if heated



Appearance opaque

Physical state Aerosol

Odor Light Vanilla Scent

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Wear protective gloves/protective clothing/eye protection/face protection
 Wash face, hands and any exposed skin thoroughly after handling
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Do not spray on an open flame or other ignition source
 Pressurized container: Do not pierce or burn, even after use

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
 Specific treatment (see first aid on this label)
 IF ON SKIN: Wash with plenty of soap and water.
 If skin irritation occurs: Get medical advice/attention
 Take off contaminated clothing and wash before reuse
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 Call a POISON CENTER or doctor/physician if you feel unwell
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None

Other information

1.9E-06% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
PROPANE/ISOBUTANE/N-BUTANE	68476-86-8	10-20
HEPTANE	64742-49-0	10-20
NAPHTHENIC OIL, SEVERLY HYDROT	64742-52-5	1-10
HYDROCARBON SOLVENT	64742-96-7	1-10
ZINC OXIDE	1314-13-2	0.1-1
TITANIUM DIOXIDE	13463-67-7	0.1-1

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First aid measures for different exposure routes**

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing. Wash contaminated clothing before reuse. Get medical attention if irritation persists.
Inhalation	Move to fresh air. Aspiration into lungs can produce severe lung damage. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.
Ingestion	Do NOT induce vomiting. No information available. Call a physician immediately. Aspiration hazard if swallowed - can enter lungs and cause damage.

Most important symptoms/effects, acute and delayed**Main Symptoms** Causes skin irritation. May cause respiratory irritation. Harmful if swallowed.**Indication of immediate medical attention and special treatment needed, if necessary****Notes to physician** Treat symptomatically.**5. FIRE-FIGHTING MEASURES**

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

Specific hazards arising from the chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact none.

Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures**Personal precautions**

Avoid contact with skin, eyes and clothing. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Contents under pressure. Do not puncture or incinerate cans. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Provide adequate ventilation.

Environmental precautions**Environmental precautions**

Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods and materials for containment and cleaning up**Methods for Containment**

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling**Advice on safe handling**

Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can.

Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible products

Strong oxidizing agents.

Aerosol Level

1

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH

PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	74-98-6: TWA: 1000 ppm 106-97-8: STEL: 1000 ppm 75-28-5: STEL: 1000 ppm	74-98-6:TWA: 1000 ppm TWA: 1800 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m ³ 106-97-8: (vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m ³	74-98-6:IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³ 106-97-8:TWA: 800 ppm TWA: 1900 mg/m ³ 75-28-5:TWA: 800 ppm TWA: 1900 mg/m ³
HEPTANE 64742-49-0	TLV: 400 ppm STEL: 500 ppm	TWA: 500 ppm	-
ZINC OXIDE 1314-13-2	STEL: 10 mg/m ³ respirable fraction TWA: 2 mg/m ³ respirable fraction	TWA: 5 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 5 mg/m ³ fume (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction (vacated) STEL: 10 mg/m ³ fume	IDLH: 500 mg/m ³ Ceiling: 15 mg/m ³ dust TWA: 5 mg/m ³ dust and fume STEL: 10 mg/m ³ fume
TITANIUM DIOXIDE 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety & Health Administration)

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

- Eye/Face Protection** Safety glasses with side-shields.
- Skin and body protection** Chemical resistant apron. Protective gloves.
- Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

<p>Physical state Aerosol</p> <p>Appearance opaque</p> <p>Color beige</p>	<p>Odor Light Vanilla Scent</p> <p>Odor Threshold No information available</p>
<p>Property</p> <p>pH No information available</p> <p>Melting/freezing point No information available</p> <p>Boiling point/boiling range No information available</p> <p>Flash Point -97 °C / -142 °F</p> <p>Evaporation rate No information available</p> <p>Flammability (solid, gas) No information available</p>	<p>Remarks • Methods</p> <p>Based on propellant</p>

Flammability Limits in Air

upper flammability limit	No information available	
lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	0.729	
Water solubility	Practically insoluble	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	Not applicable
Decomposition temperature	No information available	
Viscosity	No information available	
Explosive properties	No information available	

Other information

VOC Content(%) 23.41

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Strong oxidizing agents. Strong bases.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon oxides. Fumes.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation	Irritating to respiratory system. May cause drowsiness or dizziness. Avoid breathing vapors or mists.
Eye contact	Avoid contact with eyes.
Skin contact	Irritating to skin. Avoid contact with skin.
Ingestion	Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
HEPTANE 64742-49-0	> 5000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 73680 ppm (Rat) 4 h
HYDROCARBON SOLVENT 64742-96-7	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.28 mg/L (Rat) 4 h
ZINC OXIDE 1314-13-2	> 5000 mg/kg (Rat)	-	-

TITANIUM DIOXIDE 13463-67-7	> 10000 mg/kg (Rat)	-	-
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Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, tiredness, nausea, and vomiting. Causes respiratory irritation. Causes skin and eye irritation. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Irritating to skin.
Sensitization None known.
Germ Cell Mutagenicity May cause genetic defects.
Carcinogenicity The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
TITANIUM DIOXIDE 13463-67-7	-	2B	-	-

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive toxicity This product does not contain any known or suspected reproductive hazards.
Specific target organ systemic toxicity (single exposure) May cause respiratory irritation. May cause drowsiness and dizziness.
Specific target organ systemic toxicity (repeated exposure) No information available.
Target Organ Effects Central nervous system, Eyes, Respiratory system, Skin.
Aspiration hazard May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 1.9E-06% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 23938 mg/kg

ATEmix (dermal) 30287 mg/kg

ATEmix (inhalation-dust/mist) 5086.3 mg/l

ATEmix (inhalation-vapor) 239 mg/l

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	-	-	-	-
NAPHTHENIC OIL, SEVERLY HYDROT 64742-52-5	-	5000 mg/L LC50 Oncorhynchus mykiss 96h	-	1000 mg/L EC50 Daphnia magna 48h

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	log Pow
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PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	2.8
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Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground CONSUMER COMMODITY ORM-D
or
LIMITED QUANTITY

IATA UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY.

IMDG UN1950, AEROSOLS, 2.1, LTD. QTY.

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
PROPANE/ISOBUTANE/N-BUTANE	X	X	X	Not listed	X	X	X	X
HEPTANE	X	X	X	X	X	X	X	X
NAPHTHENIC OIL, SEVERLY HYDROT	X	X	X	X	X	X	X	X
HYDROCARBON SOLVENT	X	X	X	Not listed	X	X	X	X
ZINC OXIDE	X	X	X	X	X	X	X	X
TITANIUM DIOXIDE	X	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS-No	Weight %*	SARA 313 - Threshold Values %
ZINC OXIDE - 1314-13-2	1314-13-2	0.1-1	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	no

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
ZINC OXIDE 1314-13-2		X		

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
TITANIUM DIOXIDE - 13463-67-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
ZINC OXIDE 1314-13-2	X	X	X
TITANIUM DIOXIDE 13463-67-7	X	X	X

EPA Pesticide Registration Number Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

A Compressed gases
B5 Flammable aerosol
D2B Toxic materials



16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 2	Flammability 4	Instability 0	Physical and chemical hazards -
<u>HMIS</u>	Health Hazard 2	Flammability 4	Physical Hazard 1	Personal protection X

Prepared By IES
Regulatory Dept

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Revision Note

No information available

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet