

SAFETY DATA SHEET.

Issuing date 28-Apr-2017

Revision Date 25-Apr-2018

Version 8

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 for forklifts used in food, beverage, and pharmaceutical processing areas.
Uses advised against No information available

Manufacturer:
International Epoxies & Sealers
P.O. Box 185
San Antonio, FL 33576
Phone: 1-800-451-7206

Emergency telephone number
Chemical Emergency Phone Number INFOTRAC: 1-800-535-5053 (NORTH AMERICA)
INFOTRAC: 1-352-323-3500 (INTERNATIONAL)

2. HAZARDS IDENTIFICATION

Classification


Skin corrosion/irritation	Category 2
Carcinogenicity	Category 2
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
 Suspected of causing cancer.
 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** Solvent

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.
 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 it before reuse
 IF SWALLOWED: Immediately call a POISON CENTER /doctor/physician
 Do NOT induce vomiting.

Precautionary Statements - Storage

Store locked up
 Protect from sunlight. Store in a well-ventilated place
 Do not expose to temperatures exceeding 122°F (50°C)

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None

Other information

0.0000019% 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	1-10
NAPHTHENIC OIL, SEVERLY HYDROT	64742-52-5	1-10
HYDROCARBON SOLVENT	64742-96-7	1-10
ZINC OXIDE	1314-13-2	<1
TITANIUM DIOXIDE	13463-67-7	<1
AMMONIA	1336-21-6	<0.1

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

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

General advice	Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, mist, or gas.
Eye contact	Immediately flush with plenty of water for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing. If eye irritation persists, consult a doctor.
Skin contact	Wash off with soap and plenty of water. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.
Ingestion	Call a physician or Poison Control Center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

Most important symptoms/effects, acute and delayed

Main Symptoms	Causes skin irritation. Suspected of causing cancer. May be fatal if swallowed and enters airways.
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Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Water fog. Dry chemical. Foam. Carbon dioxide (CO₂). Cool containers/tanks with water spray. Dry chemical. Carbon dioxide (CO₂). Water spray. Alcohol-resistant foam. Water fog. Carbon dioxide (CO₂). Cool containers / tanks with water spray. Water fog. Carbon Dioxide (CO₂), Foam, Dry Chemical. Cool Tanks/ containers with water spray. Foam.

Unsuitable Extinguishing Media . Cool containers / tanks with water spray. Keep away from sources of ignition - No smoking. Do not smoke. Do not use a solid water stream as it may scatter and spread fire. Remove all sources of ignition.

Specific hazards arising from the chemical

Extremely Flammable / Flammable. Keep product and empty container away from heat and sources of ignition. Risk of ignition. In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray. Flammable. Keep product and empty container away from heat and sources of ignition.

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. Use shielding to protect fire-fighters from bursting containers. In the event of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use with adequate ventilation to keep the exposure levels below the OELS. Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions

Environmental precautions Vapors can accumulate in low areas. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. Report spills as required by local and federal regulations. Should not be released into the environment.

Methods and materials for containment and cleaning up

Methods for Containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains.

Methods for cleaning up Soak up with inert absorbent material. Contain liquid and collect with an inert, non-combustible material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly . After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Contents under pressure. Do not puncture or incinerate cans. Handle in accordance with good industrial hygiene and safety practice. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces, and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Store locked up.

Incompatible products Strong acids, alkalis, 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 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**

Ventilation systems. Use adequate ventilation to keep the exposure levels below the occupational exposure limits. Showers. Eyewash stations. Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Tightly fitting safety goggles.

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

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Avoid breathing vapors, mist or gas. Wear personal protective equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties**Physical state**

Aerosol

Appearance

Opaque

Color

White

Odor

Odor Threshold

Solvent

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	10.97	+/- 0.50
Melting/freezing point	No information available	
Boiling point/boiling range		
Flash Point	-97 °C / -143 °F	Based on propellant
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit		
lower flammability limit		
Vapor pressure		
Vapor density		
Specific Gravity	0.729	
Water solubility	Negligible	
Partition coefficient: n-octanol/water		
Autoignition temperature	No information available	Not applicable
Decomposition temperature		
Viscosity	No information available	
Explosive properties		
<u>Other information</u>		
VOC Content(%)	23.41	

10. STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage conditions

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

oxidizing materials. Strong bases. Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible Materials

Strong acids, alkalis, oxidizing agents.

Hazardous Decomposition Products

Carbon oxides , Hydrocarbons, Fumes. Fumes.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Respiratory irritation may occur if excessive exposure to product by inhalation.
Eye contact	Eye irritation may occur if excessive exposure to product occurs.
Skin contact	Causes skin irritation.
Ingestion	May be fatal if swallowed and enters airways.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	-	-	=31mg/L (Rat) 4 hr
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)	-	-
AMMONIA 1336-21-6	= 350 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms Causes skin irritation. Suspected of causing cancer. May be fatal if swallowed and enters airways.

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

Skin corrosion/irritation Irritating to skin.
Eye damage/irritation Under normal conditions there is no eye irritation . Excessive conditions to product may cause eye irritation.
Sensitization Not a known sensitizer.
Germ Cell Mutagenicity Not a germ cell mutagen.
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 contains a chemical(s) which is a known or suspected reproductive hazard .
Specific target organ systemic toxicity (single exposure) No known effect based on information supplied.
Specific target organ systemic toxicity (repeated exposure) No known effect based on information supplied.
Chronic toxicity Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest.
Target Organ Effects No known effects under normal use conditions.
Neurological effects Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
Aspiration hazard May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0.0000019% 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
AMMONIA 1336-21-6	-	8.2 mg/L LC50 Pimephales promelas 96h	-	0.66 mg/L EC50 water flea 48h 0.66 mg/L EC50 Daphnia pulex 48h

Persistence and degradability

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Bioaccumulation

Chemical Name	log Pow
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	<=2.8

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). Dispose of in accordance with federal, state, and local regulations. Dispose of in accordance with federal, state, and local regulations. Dispose of contents/container in accordance with local regulation.

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

4505 WHITE LITHIUM GREASE

Revision Date 25-Apr-2018

PROPANE/ISOBUTANE/N-BUTANE	X	X	X	x	X	X	X	X
HEPTANE	X	X	X	Not listed	X	X	X	X
NAPHTHENIC OIL, SEVERLY HYDROT	X	X	X	Not listed	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
AMMONIA	X	X	X	X	X	X	X	X

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDL** - 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 contain a chemical or 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	<1	1.0
AMMONIA - 1336-21-6	1336-21-6	<0.1	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Star Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

Clean Water Act

This product does contain 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		
AMMONIA 1336-21-6	1000 lb			X

CERCLA

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

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
AMMONIA 1336-21-6	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Titanium Dioxide, (CAS # 13463-67-7), must be airborne, unbound, and of a particle size < 10 micrometers in diameter to be considered a Proposition 65 chemical . For this product, Titanium Dioxide is bound in the product and no inhalation exposure will occur during the handling or use of this product in this application.



This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Chemical Name	California Prop. 65
TITANIUM DIOXIDE - 13463-67-7	Cancer <1%

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
AMMONIA 1336-21-6	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 SDS contains all the information required by the CPR.

WHMIS Hazard Class

- A Compressed gases
- B5 Flammable aerosol
- D2B Toxic materials

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 4	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2*	Flammability 4	Physical Hazard 1	Personal protection B
<i>Chronic Hazard Star Legend</i>		<i>Chronic Health Star Hazard Repeated or prolonged exposure may cause damage</i>		<i>central nervous system</i>

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Revision Note

(M)SDS sections updated 15

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