DAC Industries, Inc.
Safety Data Sheet

1. Identification

Product name: Super Lube

Product code: DAC-113

Recommended use: Lubricant

Restrictions on use: None known

Supplier: DAC Industries, Inc.
1636 Gervais Avenue - Suite 9
Maplewood, MN 55109, USA
T +1 (651) 748-1750

Emergency number: (Chemical Spills, Leaks, Fire, Exposure or Accident only):
CHEMTREC 1-800-424-9300 (in the US), 1-703-527-3887 (Outside the US)
Chemtrec - Mexico 01-800-681-9531

Issue date: 03/27/2023

2. Hazard(s) identification

Classification:

Physical hazards	Health hazards
Flammable aerosol Category 1 Gases under pressure Compressed gas	Skin corrosion/irritation Category 2 Serious eye damage Category 1 Skin sensitization, Category 1 Carcinogenicity Category 2 Reproductive toxicity Category 2 Specific target organ toxicity (repeated exposure) Category 2 Aspiration hazard Category 1

GHS US labeling:

Danger!

Hazard statements (GHS US)	Precautionary statements (GHS US)
H222 - Extremely flammable aerosol H280 - Contains gas under pressure; may explode if heated H304 - May be fatal if swallowed and enters airways H315 - Causes skin irritation H317 - May cause an allergic skin reaction H318 - Causes serious eye damage H351 - Suspected of causing cancer H361 - Suspected of damaging fertility or the unborn child	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 - Do not spray on an open flame or other ignition source. P251 - Pressurized container: Do not pierce or burn, even

H373 - May cause damage to organs (blood, liver, kidneys, nervous system) through prolonged or repeated exposure	after use. P260 - Do not breathe vapors, spray. P264 - Wash hands thoroughly after handling. P272 - Contaminated work clothing must not be allowed out of the workplace. P280 - Wear protective gloves, eye protection. P301+P310 - If swallowed: Immediately call a poison center or doctor. P331 - Do NOT induce vomiting. P302+P352 - If on skin: Wash with plenty of soap and water. P362+P364 - Take off contaminated clothing and wash it before reuse. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor/physician. P308+P313 - If exposed or concerned: Get medical advice/attention. P314 - Get medical advice/attention if you feel unwell. P403 - Store in a well-ventilated place. P405 - Store locked up. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P501 - Dispose of contents/container to an approved waste disposal plant.

3: Composition/Information on ingredients

Component	CAS-No.	Amount (%)
Isobutane	75-28-5	80-85
Zinc alkyldithiophosphate	Proprietary	<3
Propane	74-98-6	10-15
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	<1
Amides, coco, N,N-bis(hydroxyethyl)	68603-42-9	<1
Barium Sulfonate	Proprietary	<1
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	<1
Petroleum distillates	64742-65-0	<1
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	<1
Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9	<1
2,2'-iminodiethanol, diethanolamine	111-42-2	<1
Fatty acids, coco, compds. with diethanolamine	61790-63-4	<1

***Chemical name, CAS number and/or exact concentration have been withheld as a trade secret**

4. First-aid measures

Inhalation: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.

Skin: Wash skin with plenty of water and soap. Remove/Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

Ingestion: Get immediate medical advice/attention. Do NOT induce vomiting.

Symptoms/effects: May cause minor irritation to the respiratory tract and to other mucous membranes. Causes serious eye damage. Causes skin irritation. May cause an allergic skin reaction. Aspiration hazard. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. May be fatal if swallowed and enters airways. May cause damage to organs (kidneys, central nervous system, liver, blood) through prolonged or repeated exposure. Suspected of damaging fertility or the unborn child. Suspected of causing cancer.

Immediate medical attention and special treatment, if necessary: Immediate medical attention is required for eye contact. Aspiration hazard. If accidentally swallowed obtain immediate medical attention.

5. Fire-fighting measures

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire. Water spray. Dry powder. Foam. Carbon dioxide. Cool down the containers exposed to heat with a water spray.

Unsuitable extinguishing media: None.

Fire hazard: Extremely flammable aerosol. Contents under pressure. Keep away from open flames, hot surfaces and sources of ignition. Pressurized container: may burst if heated.

Special protective equipment and precautions for fire-fighters: Use shielding to protect from bursting cans. Do not attempt to take action without suitable protective equipment. Complete protective clothing. Self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe aerosol. Avoid contact with eyes, skin and clothing.

Methods and material for containment and cleaning up: Collect spillage. Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of materials or solid residues at an authorized site.

For further information refer to section 8: "Exposure controls/personal protection". For waste disposal after cleaning, see section 13.

7. Handling and storage

Precautions for safe handling: Do not handle until all safety precautions have been read and understood. Ensure adequate ventilation. Do not breathe aerosol. Use personal protective equipment as required. Do not get in eyes, on skin, or on clothing. Pressurized container: Do not pierce or burn, even after use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Handle in accordance with good industrial hygiene and safety practice.

Storage conditions: Do not expose to temperatures exceeding 50 °C/ 122 °F. Protect from sunlight. Store in a well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. U.F.C. (NFPA 30B) Level III Aerosol.

8. Exposure controls/personal protection

Exposure guidelines:	
Isobutane	1000 ppm (EX - Explosion hazard) STEL ACGIH TLV;
Propane	1800 mg/m³ TWA OSHA PEL; 1000 ppm TWA OSHA PEL;
Zinc alkyldithiophosphate	None established.
Barium Sulfonate	0.5 mg/m³ TWA OSHA PEL; 0.5 mg/m³ TWA ACGIH TLV;
Distillates (petroleum), hydrotreated heavy naphthenic	5 mg/m³ TWA OSHA PEL; 5 mg/m³ (I - Inhalable particulate matter) TWA ACGIH TLV;
Distillates (petroleum), hydrotreated heavy paraffinic	5 mg/m³ TWA OSHA PEL; 5 mg/m³ (I - Inhalable particulate matter) TWA ACGIH TLV;
Petroleum distillates	5 mg/m³ TWA OSHA PEL; 5 mg/m³ (I - Inhalable particulate matter) TWA ACGIH TLV;
Distillates (petroleum), hydrotreated light paraffinic	None established.
Distillates (petroleum), solvent-dewaxed light paraffinic	5 mg/m³ TWA OSHA PEL; 5 mg/m³ inhalable TWA ACGIH TLV;
Amides, coco, N,N-bis(hydroxyethyl)	None established.
2,2'-iminodiethanol, diethanolamine	1 mg/m³ (Inhalable fraction and vapor) TWA ACGIH TLV;
Fatty acids, coco, compds. with diethanolamine	None established.

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Environmental exposure controls: Avoid release to the environment.

Personal protective equipment:

Hand protection: Wear protective gloves.

Eye protection: Wear safety goggles or other eye protection to prevent eye contact.

Skin and body protection: Wear suitable protective clothing

Respiratory protection: No respiratory protection needed under normal use conditions. In operations where exposure limits are exceeded or exposure levels are excessive, an approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

9. Physical and chemical properties

Appearance: Aerosol spray can.

Physical state : Liquid
Color : Colorless
Odor : Mild odor
Odor threshold : No data available

pH : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available

Flash point	: ≈ -104 °C (-155.2 °F)	**Decomposition temperature**	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available	**Viscosity, kinematic**	: No data available
Flammability	: Extremely flammable aerosol.	**Viscosity, dynamic**	: No data available
Vapor pressure	: No data available	**Explosion limits**	: Lower explosion limit: 1.8 vol % Propellant gas Upper explosion limit: 9.5 vol % Propellant gas
Relative vapor density at 20°C	: No data available	**Explosive properties**	: No data available
Relative density	: < 1	**Oxidizing properties**	: Not oxidising.
Solubility	: Not miscible.		
Partition coefficient n-octanol/water (Log Pow)	: No data available		
Auto-ignition temperature	: No data available		

No additional information available

10. Stability and reactivity

Reactivity: Extremely flammable aerosol.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: No dangerous reactions known under normal conditions of use.

Conditions to avoid: Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

Incompatible materials : Strong oxidizing agents. Acids. Strong bases. Strong reducing agents.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Inhalation: At high concentrations, the vapors can be irritating to the respiratory system.

Skin: Causes skin irritation. May cause an allergic skin reaction.

Eyes: Causes serious eye damage.

Ingestion: Aspiration hazard. May be fatal if swallowed and enters airways. Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

Chronic symptoms: Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs (kidneys, central nervous system, liver, blood) through prolonged or repeated exposure.

Carcinogenicity:	Suspected of causing cancer.
Amides, coco, N,N-bis(hydroxyethyl):	IARC 2B - Possibly carcinogenic to humans;
2,2'-iminodiethanol, diethanolamine:	IARC 2B - Possibly carcinogenic to humans;
Germ cell mutagenicity:	Not classified
Reproductive toxicity:	Suspected of damaging fertility or the unborn child.

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified

Acute toxicity (inhalation) : Not classified

Numerical measures of toxicity:

The following are the toxicity values for the components:

Isobutane	> 20000 ppm/4h LC50 Inhalation - Rat [ppm]
Propane	> 20000 ppm/4h LC50 Inhalation - Rat [ppm]
Zinc alkyldithiophosphate	No data available
Barium Sulfonate	No data available
Distillates (petroleum), hydrotreated heavy naphthenic	> 5000 mg/kg LD50 oral rat; > 2000 mg/kg LD50 dermal rabbit; > 5 mg/l LC50 Inhalation - Rat
Distillates (petroleum), hydrotreated heavy paraffinic	> 5000 mg/kg LD50 oral rat; > 5000 mg/kg LD50 dermal rabbit; > 2000 mg/kg LD50 dermal rat; > 5000 mg/m³ LC50 Inhalation - Rat
Petroleum distillates	> 5000 mg/kg LD50 oral rat
Distillates (petroleum), hydrotreated light paraffinic	> 5000 mg/kg LD50 oral rat
Distillates (petroleum), solvent-dewaxed light paraffinic	> 5000 mg/kg LD50 oral rat; > 2000 mg/kg LD50 dermal rabbit; > 2.18 mg/l LC50 Inhalation - Rat (Dust/Mist)
Amides, coco, N,N-bis(hydroxyethyl)	12200 mg/kg LD50 oral rat
2,2'-iminodiethanol, diethanolamine	1600 mg/kg LD50 oral rat
Fatty acids, coco, compds. with diethanolamine	500 mg/kg Calculated value LD50 oral
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye damage.
Respiratory or skin sensitization	May cause an allergic skin reaction.
STOT-single exposure	Not classified
STOT-repeated exposure	May cause damage to organs (blood, liver, kidneys, nervous system) through prolonged or repeated exposure.
Aspiration hazard	May be fatal if swallowed and enters airways.

12. Ecological information

Ecology - general: Toxic to aquatic life.

Ecotoxicity:

Zinc alkyldithiophosphate	4.5 mg/l Oncorhynchus mykiss (Rainbow trout) LC50 - Fish; 23 mg/l Daphnia magna (Water flea) EC50 - Crustacea
Distillates (petroleum), hydrotreated heavy paraffinic	≥ 100 mg/l LC50 - Fish > 10000 ml/l EC50 - Crustacea
Distillates (petroleum), solvent-dewaxed light paraffinic	> 100 mg/l LC50 - Fish; > 100 mg/l ErC50 algae; 10 mg/l NOEC chronic crustacea
Amides, coco, N,N-bis(hydroxyethyl)	3.6 mg/l Danio rerio (Zebrafish) LC50 - Fish; 2.15 mg/l Daphnia magna (Water flea) EC50 – Crustacea
2,2'-iminodiethanol, diethanolamine	460 mg/l Oncorhynchus mykiss (Rainbow trout) LC50 - Fish 30.1 mg/l Ceriodaphnia dubia EC50 – Crustacea 89.9 mg/l Ceriodaphnia dubia EC50 - Crustacea 9.5 mg/l Pseudokirchneriella subcapitata EC50 72h - Algae 0.78 mg/l Daphnia magna (Water flea) NOEC (chronic); > 1 mg/l freshwater fish NOEC chronic fish

Persistence and degradability: No data available
Bioaccumulative potential: No data available

Zinc alkyldithiophosphate:	Log KOW0.69
Distillates (petroleum), hydrotreated heavy paraffinic:	LOG POW3.9 – 6
Distillates (petroleum), solvent-dewaxed light paraffinic:	LOG POW3.9 – 6

Mobility in soil: No data available

Other adverse effects:

No data available

13. Disposal considerations

Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.

Additional information: Empty containers retain product residue and can be hazardous.

14. Transport information

Department of Transportation (DOT)

Proper Shipping Name (DOT)	: Aerosols
UN-No.(DOT)	: UN1950
Class (DOT)	: 2.1
Packing group (DOT)	: Not applicable
Hazard labels (DOT)	: Flammable gas

Transport by sea

Proper Shipping Name (IMDG)	: AEROSOLS
UN-No. (IMDG)	: 1950
Class (IMDG)	: 2.1
Packing group (IMDG)	: Not applicable

Air transport

Proper Shipping Name (IATA)	: Aerosols, flammable
UN-No. (IATA)	: 1950
Class (IATA)	: 2.1
Packing group (IATA)	: Not applicable

15. Regulatory information

SARA Section 313 - Emission Reporting: Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Zinc alkyldithiophosphate	Proprietary	<3%
Barium Sulfonate	Proprietary	<1%
2,2'-iminodiethanol, diethanolamine	111-42-2	<1%

CERCLA Section 103:

2,2'-iminodiethanol, diethanolamine	111-42-2	100 lb

SARA 302:

Not applicable

SARA Section 311/312 Hazard Classes: Refer to Section 2 for OSHA Hazard Classification.

California Proposition 65:

WARNING: This product can expose you to 2,2'-iminodiethanol, diethanolamine, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

TSCA: All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

16. Other information

Issue date : 03/27/2023

Indication of changes:
new version.

NOTICE

The information contained herein has been developed based upon current available scientific data. New information may be developed from time to time which may render the conclusions of this report obsolete. Therefore, no warranty is extended as to the applicability of this information to the user's intended purpose or the consequences of its use or misuse.