SAFETY DATA SHEETS

This SDS packet was issued with item:

071449040

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

071313303 071366814 273045182

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

070499814



Issued on 02/15/2017 Edition number 8 Reviewed on 02/15/2017

1 Identification

· Product identifier

· Trade name: <u>Lubrifluid</u> · Article number: 1600064

· Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the preparation:

For industrial use only

Lubricant

· Details of the supplier of the safety data sheet

· Manufacturer / Supplier:

Bien Air USA, Inc. 5 Corporate Park

Suite 160

IRVINE, CA 92606

USA

Phone..: (800)-433-2436 Phone..: (949)-477-6050 Fax no.: (949)-477-6051 office@bienair.com

· Emergency telephone number:

Within USA and Canada . : 1-800-424-9300

Outside USA and Canada: +1-703-527-3887 (collect calls accepted)

2 Hazard(s) identification

· OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

· Classification of the substance or mixture

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

- · Label elements
- · GHS label elements The product is classified and labeled according to 29 CFR 1910.1200 (OSHA Hazcom 2012).
- · Hazard pictograms





GHS02 GHS04

- · Signal word Danger
- · Hazard statements

H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P251 Do not pierce or burn, even after use.

P211 Do not spray on an open flame or other ignition source.

P304+P341 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

· Other hazards None

USA



Issued on 02/15/2017 Edition number 8 Reviewed on 02/15/2017

Trade name: Lubrifluid

(Contd. of page 1)

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

Mixture: consisting of the following components.

Active substance with propellant

· Declarable components:

CAS no.		
64742-49-0	Low boiling point hydrogen treated naphtha, content of benzene: < 0.1%	>20-<40%
74-98-6	propane	>20-<30%
106-97-8	butane	>20-<30%
68649-11-6	1-Decene, dimer, hydrogenated	< 2.00%

· Additional information:

The specific chemical identity and/or exact percentage concentration of proprietary components is withheld as a trade secret.

4 First-aid measures

- · Description of first aid measures
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- \cdot Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.
- · Additional information Cool endangered receptacles with water spray.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Ensure adequate ventilation.
- · Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

(Contd. on page 3)



Issued on 02/15/2017 Edition number 8 Reviewed on 02/15/2017

Trade name: Lubrifluid

(Contd. of page 2)

The product has been classified and marked in accordance with directives on hazardous materials.

Observe the general safety regulations when handling chemicals.

· Information about protection against explosions and fires:

Do not spray on a naked flame or any incandescent material. Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights.

Do not pierce or burn, even after use.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Store only in the original receptacle.

Observe official regulations on storing packagings with pressurized containers.

- · Information about storage in one common storage facility: Store away from oxidizing agents.
- · Further information about storage conditions:

Protect from heat and direct sunlight.

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

Optimal storage temperature between -4°F and +104°F

Duration of storage: In original container, at least 3 years.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters

 Components with limit v 	values at t	the workp	lace:
---	-------------	-----------	-------

EL (Canada) Long-term value: 1000 ppm

74-98-6 propane

EV (Canada)	Long-term value: 1.000 ppm
PEL (USA)	Long-term value: 1800 mg/m³, 1000 ppm
REL (USA)	Long-term value: 1800 mg/m³, 1000 ppm
TLV (USA)	refer to Appendix F inTLVs&BEIs book; NIC-EX

106-97-8 butane

EL (Canada) Short-term value: 750 ppm

Long-term value: 600 ppm

EV (Canada) Long-term value: 800 ppm

REL (USA) Long-term value: 1900 mg/m3, 800 ppm TLV (USA) Short-term value: (2370) mg/m³, (1000) ppm

NIC-EX

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- Respiratory Protection: Use suitable respiratory protective device in case of insufficient ventilation.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- · Material of gloves (recommended): Suitable protective gloves: Nitrile gloves, minimum thickness of 0.3 mm.
- · Breakthrough time of glove material:

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. (Contd. on page 4)



Issued on 02/15/2017 Edition number 8 Reviewed on 02/15/2017

Trade name: Lubrifluid

(Contd. of page 3)

· Eye protection (recommended):

Use of tight fitting goggles

Eye protector with side protection (framed eyeglasses) ANSI Z87.1 – 2010

· Body protection (recommended): Protective work clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:
Color:
Color:
Odor:
Odor threshold:

Peppermint
Not determined.

PH-value:

Not applicable.

· Change in condition:

Melting point/Melting range: Not applicable

Boiling point/Boiling range: Active substance: >572°F (DIN 51751 / ASTM D86)

Not applicable, as aerosol.

• Flash point: Active substabce: >392°F (ISO 2592 / ASTM D92)

Not applicable, as aerosol.

• Evaporation rate Not determined.

· Flammability (solid, gaseous): Extremely flammable liquefied gas.

Not applicable.

· Explosion limits (@1013 mbar):

Lower: 1.1 Vol %
Upper: 10.9 Vol %
• Oxidizing properties Not applicable.

• Relative density Active substance: 0.83 @ 20 °C (DIN 51757 / ASTM D1217)

Vapor densityEvaporation rateNot applicable.Not applicable.

· Solubility in / Miscibility with

Water: Not determined.

· Partition coefficient (n-octanol/water): Not determined.

• Auto-ignition temperature: Product is not selfigniting.

· Decomposition temperature: Not determined.

· Viscosity

Kinematic: Active substance: 15 mm²/s @ 40 °C (ISO 3104 / ASTM D445)

• **VOC content:** 850 g/L (ASTM E1868-10); Concentrate in the packaging as sold.

· Other information: none

10 Stability and reactivity

- · Reactivity None known if used as directed.
- · Chemical stability Stable under recommended storage conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions Reacts with strong oxidizing agents.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.

(Contd. on page 5)



Issued on 02/15/2017 Edition number 8 Reviewed on 02/15/2017

Trade name: Lubrifluid

 Hazardous decomposition products (in case of fire or oxidation):

Carbon monoxide and carbon dioxide

(Contd. of page 4)

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:
 - * pure substance

ATE (Acute Toxicity Estimates)

Inhalative LD50 848 mg/L

106-97-8 butane

Inhalative LD50 658 mg/L (rat)

68037-01-4 1-Decene, homopolymer, hydrogenated

Oral LD50 >5000 mg/kg (rat) (OECD 401)
Dermal LD50 >2000 mg/kg (rabbit) (OECD 402)
Inhalative LD50 > 5200 mg/L (rat)

- · Additional toxicological information:
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed in groups 1, 2A, or 2B.

· NTP (National Toxicology Program)

None of the ingredients are listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity:
 - * pure substance

68037-01-4 1-Decene, homopolymer, hydrogenated

EC50/96h 1000 mg/L (Algae) (OECD 201)

1000 mg/L (Oncorhynchus mykiss) (OECD 203)

EC50/48h 1000 mg/L (Daphnia magna) (OECD 202)

- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Do not allow product to reach ground water, water course or sewage system.
- Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 6)



Issued on 02/15/2017 Edition number 8 Reviewed on 02/15/2017

Trade name: Lubrifluid

(Contd. of page 5)

- · Used containers
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

· UN-Number

· DOT, IMDG, IATA UN1950

· **DOT** Aerosols, flammable

· IMDG AEROSOLS

· IATA AEROSOLS, flammable

· DOT



· Hazard Classification: 2.1 · Label 2.1

· IMDG, IATA



Hazard Classification: 2.1 Label 2.1

· DOT, IMDG, IATA not applicable

· Environmental hazards

· Marine pollutant (according to IMDG): No

· Special precautions for user Warning: Gases

• **EMS Number**: F-D,S-U

• Stowage Code SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For

AEROSOLS with a capacity above 1 litre: Category B. For WASTE

AEROSOLS: Category C, Clear of living quarters.

• Segregation Code SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as

for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the

appropriate subdivision of class 2.

· Transport/Additional information:

· DOT

· Remarks: Contains: hydrocarbons

• Excepted quantities (EQ) Code: E0

Not permitted as Excepted Quantity

· IMDG

Limited quantities (LQ)Excepted quantities (EQ)Code: E0

Not permitted as Excepted Quantity

· IATA Dangerous Goods Regulation (DGR): latest edition

(Contd. on page 7)



Issued on 02/15/2017 Edition number 8 Reviewed on 02/15/2017

Trade name: Lubrifluid

(Contd. of page 6)

• UN "Model Regulation": UN1950, Aerosols, 2.1

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture:
- · SARA (Superfund Amendments and Reauthorization)
- Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

This product does not contain a chemical that are listed in Section 313.

· TSCA (Toxic Substances Control Act):

All ingredients are listed on the U.S. TSCA inventory or exempt from premanufacture notice requirements.

· California Proposition 65

This product does not intentionally contain any chemicals known by the State of California to cause cancer and/or birth defects. Moreover, we do not routinely analyze its products for impurities which may be such chemicals.

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

- · Carcinogenic categories:
- · EPA (Environmental Protection Agency)

None of the ingredients are listed.

· NIOSH-Carcinogen list

None of the ingredients are listed.

- · California SCAQMD Rule 1144: Not applicable.
- · GHS label elements GHS label elements are issued under section 2.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Regulations / approvals / other listings:

All major components are U.S. FDA listed for H1 Lubricants, or correspond to the current Pharmacopoeia or food grade requirements.

All contents comply with current pharmacological or food grade standards.

· H.R.2420 (RoHS):

This product fulfill the H.R.2420 requirements in that the EDEE Act regulated materials are absent or their concentrations are significantly below regulatory thresholds.

· IP346:

The mineral oil used in this product passes IP346 for DMSO extractable PAH's (Polycyclic aromatic hydrocarbons).

· BSE/TSE:

This product adheres to the standards of TSE/BSE-free products, according to European Community directives 93/42/EEC and 2003/32/EC.

(Contd. on page 8)



Issued on 02/15/2017 Edition number 8 Reviewed on 02/15/2017

Trade name: Lubrifluid

(Contd. of page 7)

Materials and/or synthetically modified materials which are of animal origin from bovine, ovine, goats, cats, dogs, deer, elk and/or mink, are NOT included in this product.

This product is entirely free from latex containing materials.

NFPA ratings (scale 0-4)



Health = 0Fire = 4Reactivity = 3

· HMIS ratings (0-4)



Health = 0Fire = 4Reactivity = 3

Department issuing SDS: Product Stewardship

· Editor's notice:

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications have not the meaning of guarantees on properties.

- Date of preparation / last revision 02/15/2017 / 7

Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation

RoHS: Restriction of Hazardous Substances

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of

Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

ISO: International Organisation for Standardisation

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic chemicals vPvB: very Persistent and very Bioaccumulative chemicals NIOSH: National Institute for Occupational Safety and Health OSHA: Occupational Safety and Health Administration

ATE: Acute Toxicity Estimate

Flam. Aerosol 1: Aerosols - Category 1

Press. Gas: Gases under pressure - Compressed gas

· * Data compared to the previous version altered.

The asterisk (*) on the left side indicate the respective changes from the previous version.

USA