

Issued on 02/13/2014

Edition number 4

Reviewed on 02/13/2014

1 Identification

- **Product identifier**
- **Trade name:** Lubrifluid
- **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.
17880 Skypark Circle
Suite140
IRVINE, CA 92614
USA
- **Emergency telephone number:** Phone USA: (845) 294-3200

2 Hazard(s) identification

- **Classification of the substance or mixture**
- **Information concerning particular hazards for human and environment:**
The product has to be labeled due to the calculation procedure of international guidelines.
Warning! Pressurized container.
- **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **Label elements**
- **Risk phrases:**
Extremely flammable.
- **Safety phrases:**
Keep in a cool place.
Keep container in a well-ventilated place.
Keep away from sources of ignition - No smoking.
Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
Use only in well-ventilated areas.
- **Special labeling of certain preparations:**
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.
Do not spray on a naked flame or any incandescent material.
Buildup of explosive mixtures possible without sufficient ventilation.
Keep out of the reach of children.
- **Classification in accordance with Directive 75/324/EEC:** Extremely flammable
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 4
Reactivity = 3

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· **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	4	Fire = 4
REACTIVITY	3	Reactivity = 3

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Active substance with propellant

· **Declarable components:**

CAS no.

64742-49-0	Low boiling point hydrogen treated naphtha	25-50%
74-98-6	propane	10-25%
106-97-8	butane	10-25%
68649-11-6	1-Decene, dimer, hydrogenated	1.0-2.4%

- **Additional information:** Not mentioned CAS no. are to be regarded as Proprietary/Confidential.

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **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.
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **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.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** No special measures required.
- **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.

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See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

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:**

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

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 values at the workplace:**

74-98-6 propane (10-25%)

PEL 1800 mg/m³, 1000 ppm

REL 1800 mg/m³, 1000 ppm

TLV Varies mg/m³, 1000 ppm

106-97-8 butane (10-25%)

REL 1900 mg/m³, 800 ppm

TLV Varies mg/m³, 1000 ppm

- **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.

- **Material of gloves (recommended):**

Suitable protective gloves: Nitrile gloves, minimum thickness of 0.3 mm. Corresponds to the European standards DIN/EN 374-2 and 374-3.

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- **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.
- **Eye protection (recommended):**
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:	Aerosol
Color:	Colorless
Odor:	Peppermint

· Change in condition:

Melting point/Melting range:	Not applicable
Boiling point/Boiling range:	Active substance: > 572°F (> 300 °C) ASTM D86 Not applicable, as aerosol.
Drip point:	Not applicable
Pour point:	Active substance: - 22°F (- 30 °C) ASTM D97

· **Flash point:** Active substance: > 392°F (> 200 °C) ASTM D92
Not applicable, as aerosol.

· **Ignition temperature:** > 689°F (> 365 °C) ASTM E659

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Explosion limits (@1013 mbar):

Lower:	1.1 Vol %
Upper:	10.9 Vol %

· **Vapor pressure at 20 °C (68 °F):** 8300 hPa (6226 mm Hg)

· **Density:** Active substance: 0.83 g/cm³ @ 68°F (20 °C) ASTM D1217

· Solubility in / Miscibility with

Water: Insoluble.

· Viscosity

Kinematic: Active substance: 15 mm²/s @ 104°F (40 °C) ASTM D445

· **VOC content** 85 %

· **Other information:** safety relevant data, which has to be considered as product specifications.

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.

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- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products (in case of fire or oxidation):**
Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
 - > 2000 - < 5000 mg / kg (oral, rat)
 - > 5,100 mg/m³ 4h (inhalation, rat)
- **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)
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None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water
- **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.
- **Used containers**
- **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

· DOT, ADR, IMDG, IATA UN1950

· DOT



· Hazard Classification: 2.1

· Label 2.1

· IMDG, IATA



· Hazard Classification: 2.1

· Label 2.1

· Environmental hazards

· Marine pollutant (according to IMDG): No

· EMS Number: F-D,S-U

· Transport/Additional information:

· DOT

· Remarks: Contains: hydrocarbons

· IMDG

· Remarks: Contains: Hydrocarbons

· IATA

· Remarks: Contains: Hydrocarbons

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 is 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)

None of the substances are listed

All ingredients are listed.

· California Proposition 65

· Listed substances:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

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· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories:**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Carcinogen list**

None of the ingredients is listed.

· **National Toxicology Program (OSHA)**

None of the ingredients is listed.

· **California SCAQMD Rule 1144:** not applicable

· **National regulations:**

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

· **RoHS:**

This product conforms to the RoHS Directive in that the RoHS 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).

· **Department issuing MSDS:** Product Safety Department

· **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.

· **Abbreviations and acronyms:**

ICAO: International Civil Aviation Organization

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

IATA: International Air Transport Association

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

VOC: Volatile Organic Compounds (USA, EU)

ISO: International Organization for Standardization

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic chemicals

vPvB: very Persistent and very Bioaccumulative chemicals

DOT: US Department of Transportation

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Information System (USA)

NIOSH: National Institute for Occupational Safety and Health

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Material Safety Data Sheet

acc. to OSHA HCS



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OSHA: Occupational Safety and Health Administration

· * **Data compared to the previous version altered.**

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

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