

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: CASSIDA FLUID FL 5 SPRAY

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

Identified uses: Lubricating oil

Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier FUCHS LUBRICANTS DENMARK ApS
Tuborg Boulevard 12, 3
2900 Hellerup DK

Telephone: +45 32 46 3000

Contact Person: HSE Advisor
Telephone: +46 8 128 25 000
E-mail: HSEASC@fuchs-oil.com

1.4 Emergency telephone number: +45 82 12 12 12

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation (EU) 1272/2008 (CLP).

Classification according to Regulation (EC) No 1272/2008 as amended.

Physical Hazards

| | | |
|-------------------|------------|-----------------------------------------------------------------------------------------|
| Flammable aerosol | Category 1 | H222: Extremely flammable aerosol. H229: Pressurised container: May burst if heated. |
|-------------------|------------|-----------------------------------------------------------------------------------------|

Health Hazards

| | | |
|-------------------|------------|-----------------------------------------------------|
| Aspiration Hazard | Category 1 | H304: May be fatal if swallowed and enters airways. |
|-------------------|------------|-----------------------------------------------------|

Hazard summary

Physical Hazards: Flammable aerosol.

Health Hazards

Skin Contact: At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

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Ingestion: If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

2.2 Label Elements



Signal Words: Danger

Hazard Statement(s): H222: Extremely flammable aerosol.
H229: Pressurised container: May burst if heated.

Precautionary Statements

General information: P102: Keep out of reach of children.

Prevention: 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: Do not pierce or burn, even after use.

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

Supplemental label information

EUH066: Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards: By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept. The product may not be released into the environment without control.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: Mixture of components with propellant in aerosol can.

| Chemical name | Identifier | Concentration * | REACH Registration No. | Notes |
|---------------------------------|-------------------|-----------------|------------------------|-------|
| Propane | EINECS: 200-827-9 | 0,00 - <50,00% | 01-2119486944-21 | |
| Butane | EINECS: 203-448-7 | 0,00 - <50,00% | 01-2119474691-32 | |
| Isobutane (<0,1% 1,3-butadiene) | EINECS: 200-857-2 | 0,00 - <50,00% | 01-2119485395-27 | |
| Hydrocarbons, low viscosity | EINECS: 927-285-2 | 10,00 - <20,00% | 01-2119480162-45 | |
| Hydrocarbons, low viscosity | EINECS: 920-901-0 | 10,00 - <20,00% | 01-2119456810-40 | |
| Hydrocarbons, low viscosity | EC: 918-167-1 | 10,00 - <20,00% | 01-2119472146-39 | |

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.

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Classification

| Chemical name | Identifier | Classification |
|---------------------------------|-------------------|-----------------------------------------------|
| Propane | EINECS: 200-827-9 | CLP: Flam. Gas 1;H220, Press. Gas H280 |
| Butane | EINECS: 203-448-7 | CLP: Flam. Gas 1;H220, Press. Gas H280 |
| Isobutane (<0,1% 1,3-butadiene) | EINECS: 200-857-2 | CLP: Flam. Gas 1;H220, Press. Gas H280 |
| Hydrocarbons, low viscosity | EINECS: 927-285-2 | CLP: Asp. Tox. 1;H304 |
| Hydrocarbons, low viscosity | EINECS: 920-901-0 | CLP: Asp. Tox. 1;H304 |
| Hydrocarbons, low viscosity | EC: 918-167-1 | CLP: Asp. Tox. 1;H304, Aquatic Chronic 4;H413 |

CLP: Regulation No. 1272/2008.

For the wording of the listed hazard statements refer to section 16.

SECTION 4: First aid measures

General: Instantly remove any clothing soiled by the product.

4.1 Description of first aid measures

Inhalation: Supply fresh air; consult doctor in case of symptoms.

Eye contact: Promptly wash eyes with plenty of water while lifting the eye lids.

Skin Contact: Wash with soap and water.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed: If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately. Dizziness Freeze burns

4.3 Indication of any immediate medical attention and special treatment needed Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

5.1 Extinguishing media

Suitable extinguishing media: CO₂, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added

Unsuitable extinguishing media: Water with a full water jet.

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| | |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5.2 Special hazards arising from the substance or mixture: | Danger of explosion with aerosol cans. |
| 5.3 Advice for firefighters | |
| Special fire fighting procedures: | Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter drains. |
| Special protective equipment for fire-fighters: | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. |

SECTION 6: Accidental release measures

| | |
|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.1 Personal precautions, protective equipment and emergency procedures: | Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. Keep away from sources of ignition - No smoking. |
| 6.2 Environmental Precautions: | Avoid release to the environment. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so. Do not allow to enter drainage system, surface or ground water. |
| 6.3 Methods and material for containment and cleaning up: | Scrape up spillage or absorb with absorbing material. Stop the flow of material, if this is without risk. Dispose of the material collected according to regulations. |
| 6.4 Reference to other sections: | See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal. |
| | ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. |

SECTION 7: Handling and storage:

| | |
|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7.1 Precautions for safe handling: | 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. Do not pierce or burn, even after use. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. Avoid contact with flame and heat source, prevent contact with direct sunlight Use only in well-ventilated areas. |
| 7.2 Conditions for safe storage, including any incompatibilities: | Store locked up. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Local regulations concerning handling and storage of waterpolluting products have to be followed. Local regulations for the storage and handling of aerosol cans and flammable liquids have to be kept. Keep away from heat/sparks/hot surfaces. - No smoking. |
| 7.3 Specific end use(s): | Not applicable |

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SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

| Chemical name | Type | Exposure Limit Values | Source |
|---------------|------|-----------------------|------------------------------------------------------------------------------------------------------|
| Butane | GV | 500 ppm 1.200 mg/m3 | Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, An. 2 & 3 (12 2011) |
| Propane | GV | 1.000 ppm 1.800 mg/m3 | Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, An. 2 & 3 (12 2011) |

8.2 Exposure controls

Appropriate engineering controls:

Provide adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information:

Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to in handling the chemicals or the mineral oil products.

Eye/face protection:

Avoid contact with skin and eyes. Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield.

Skin protection

Hand Protection:

Material: Nitrile-butadiene rubber (NBR).
Min. Breakthrough time: ≥ 480 min
Recommended thickness of the material: $\geq 0,38$ mm

Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Other:

Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.

Respiratory Protection:

Do not breathe dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. In case of inadequate ventilation wear respiratory protection. Filter AX/P2.

Thermal hazards:

Not known.

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Hygiene measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

Environmental Controls: No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| | |
|-------------------------------------------------|--------------------------------------------|
| Physical state: | Aerosols |
| Form: | Aerosols |
| Color: | Colorless |
| Odor: | Slight |
| Odor Threshold: | Not applicable for mixtures |
| pH: | Not applicable |
| Freezing point: | Not applicable for mixtures |
| Boiling Point: | Value not relevant for classification |
| Flash Point: | < -60 °C (DIN EN ISO 2719) |
| Evaporation Rate: | Not applicable for mixtures |
| Flammability (solid, gas): | Value not relevant for classification |
| Flammability Limit - Upper (%)-: | 6,5 %(V) |
| Flammability Limit - Lower (%)-: | 0,6 %(V) |
| Vapor pressure: | Not applicable for mixtures |
| Vapor density (air=1): | Not applicable for mixtures |
| Density: | 0,78 g/cm ³ (15 °C) (DIN 51757) |
| Solubility(ies) | |
| Solubility in Water: | The product is insoluble in water. |
| Solubility (other): | No data available. |
| Partition coefficient (n-octanol/water): | Not applicable for mixtures |
| Autoignition Temperature: | Value not relevant for classification |
| Decomposition Temperature: | Value not relevant for classification |
| Kinematic viscosity: | 3,8 mm ² /s (20 °C, DIN 51562) |
| Explosive properties: | Value not relevant for classification |
| Oxidizing properties: | Value not relevant for classification |

9.2 Other information

Minimum ignition temperature: 265 °C (DIN 51794)

SECTION 10: Stability and reactivity

| | |
|-------------------------------------------------|-------------------------------------|
| 10.1 Reactivity: | Stable under normal use conditions. |
| 10.2 Chemical Stability: | Stable under normal use conditions. |
| 10.3 Possibility of hazardous reactions: | Stable under normal use conditions. |

Product name: CASSIDA FLUID FL 5 SPRAY

- 10.4 Conditions to avoid:** Stable under normal use conditions.
- 10.5 Incompatible Materials:** Strong oxidizing substances. Strong acids. Strong bases.
- 10.6 Hazardous Decomposition Products:** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:

Not classified for acute toxicity based on available data.

Specified substance(s)

Hydrocarbons, low viscosity

LD 50 (Rat): > 5.001 mg/kg (OECD 401)

Hydrocarbons, low viscosity

LD 50 (Rat): > 10.000 mg/kg

Hydrocarbons, low viscosity

LD 50 (Rat): > 5.000 mg/kg (OECD 401)

Dermal

Product:

Not classified for acute toxicity based on available data.

Specified substance(s)

Hydrocarbons, low viscosity

LD 50 (Rabbit): > 5.001 mg/kg (OECD 402)

Hydrocarbons, low viscosity

LD 50 (Rabbit): 3.160 mg/kg (OECD 402)

Inhalation

Product:

Not classified for acute toxicity based on available data.

Specified substance(s)

Butane

LC 50 (Rat, 4 h): 658 mg/l
Gas

Hydrocarbons, low viscosity

LC 50 (Rat, 4 h): > 5 mg/l

Skin Corrosion/Irritation:

Product:

Based on available data, the classification criteria are not met.

Serious Eye Damage/Eye Irritation:

Product:

Based on available data, the classification criteria are not met.

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Respiratory or Skin Sensitization:

Product: Skin sensitizer: Based on available data, the classification criteria are not met.
Respiratory sensitizer: Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Product: Based on available data, the classification criteria are not met.

Carcinogenicity

Product: Based on available data, the classification criteria are not met.

Reproductive toxicity

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Product: Based on available data, the classification criteria are not met.

Aspiration Hazard

Product: May be fatal if swallowed and enters airways.

Other adverse effects: No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Product: Based on available data, the classification criteria are not met.

Fish

Specified substance(s)

| | |
|---------------------------------|---------------------------------------------|
| Propane | LC 50 (Fish, 96 h): > 1.000 mg/l |
| Isobutane (<0,1% 1,3-butadiene) | LC 50 (Fish, 96 h): 28 mg/l |
| Hydrocarbons, low viscosity | LC 50 (Fish, 96 h): > 1.000 mg/l |
| Hydrocarbons, low viscosity | LC 50 (Fish, 96 h): > 101 mg/l |
| Hydrocarbons, low viscosity | LC 50 (Fish, 96 h): > 1.000 mg/l (OECD 203) |

Aquatic Invertebrates

Specified substance(s)

| | |
|---------------------------------|-------------------------------------|
| Isobutane (<0,1% 1,3-butadiene) | EC 50 (Water Flea, 48 h): 16,3 mg/l |
|---------------------------------|-------------------------------------|

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Hydrocarbons, low viscosity EC 50 (Water Flea, 48 h): > 1.000 mg/l

Hydrocarbons, low viscosity EC 50 (Water Flea, 48 h): > 1.000 mg/l (OECD 202)

Chronic ToxicityProduct: Based on available data, the classification criteria are not met.

**Toxicity to Aquatic Plants
Specified substance(s)**

Isobutane (<0,1% 1,3-butadiene) EC 50 (Alga, 72 h): 8,6 mg/l

Hydrocarbons, low viscosity EC 50 (Alga, 72 h): > 1.001 mg/l

Hydrocarbons, low viscosity EC 50 (Alga, 72 h): > 1.000 mg/l (OECD 201)

12.2 Persistence and Degradability

Biodegradation

Product: Not applicable for mixtures

Specified substance(s)

Hydrocarbons, low viscosity 31 % (28 d, OECD 301F) Not readily degradable.

12.3 Bioaccumulative potential

Product: Not applicable for mixtures

12.4 Mobility in soil:

Product: Not applicable for mixtures

12.5 Results of PBT and vPvB assessment:

The product does not contain any substances fulfilling the PBT/vPvB criteria.

12.6 Other adverse effects: No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: Dispose in accordance with all applicable regulations.

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws.

European Waste Codes

16 05 04*: Gases in pressure containers (including halons) containing dangerous substances.

Product name: CASSIDA FLUID FL 5 SPRAY

SECTION 14: Transport information

ADR/RID

| | |
|------------------------------------|----------|
| 14.1 UN Number: | UN 1950 |
| 14.2 UN Proper Shipping Name: | AEROSOLS |
| 14.3 Transport Hazard Class(es) | |
| Class: | 2 |
| Label(s): | 2.1 |
| Hazard No. (ADR): | – |
| Tunnel restriction code: | (D) |
| 14.4 Packing Group: | – |
| 14.5 Environmental hazards: | – |
| 14.6 Special precautions for user: | – |

ADN

| | |
|------------------------------------|---|
| 14.6 Special precautions for user: | – |
|------------------------------------|---|

IMDG

| | |
|------------------------------------|----------|
| 14.1 UN Number: | UN 1950 |
| 14.2 UN Proper Shipping Name: | AEROSOLS |
| 14.3 Transport Hazard Class(es) | |
| Class: | 2.1 |
| Label(s): | 2.1 |
| EmS No.: | F-D, S-U |
| 14.3 Packing Group: | – |
| 14.5 Environmental hazards: | – |
| 14.6 Special precautions for user: | – |

IATA

| | |
|------------------------------------|---------------------|
| 14.1 UN Number: | UN 1950 |
| 14.2 Proper Shipping Name: | Aerosols, flammable |
| 14.3 Transport Hazard Class(es): | |
| Class: | 2.1 |
| Label(s): | 2.1 |
| 14.4 Packing Group: | – |
| 14.5 Environmental hazards: | – |
| 14.6 Special precautions for user: | – |

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

Product name: CASSIDA FLUID FL 5 SPRAY

SECTION 16: Other information

Revision Information: Vertical lines in the margin indicate an amendment.

Wording of the H-statements in section 2 and 3

| | |
|------|---------------------------------------------------------|
| H220 | Extremely flammable gas. |
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: May burst if heated. |
| H280 | Contains gas under pressure; may explode if heated. |
| H304 | May be fatal if swallowed and enters airways. |
| H413 | May cause long lasting harmful effects to aquatic life. |

Other information: The classification complies with the current EU lists; however, it has been supplemented with expert literature information and information provided by/about our company. It was derived from the test data and/or the application of the conventional method.

Revision Date: 23.04.2019

Disclaimer: The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no signature.