

## 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:** Rivolta F.L. 1000 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** Bremer & Leguil GmbH  
Am Burgacker 30 - 42  
47051 Duisburg / Germany  
info@bremer-leguil.de  
+49 (0)203 / 9923-0

**Telephone:**

**Contact Person:** Bremer & Leguil GmbH - Product Safety Management  
**E-mail:** product-safety@bremer-leguil.de

**1.4 Emergency telephone number:** +49 (0) 6131 19240 (Giftinformationszentrum Mainz)

### 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

Aerosol	Category 1	H222: Extremely flammable aerosol. H229: Pressurized container: May burst if heated.
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##### Environmental Hazards

Chronic hazards to the aquatic environment	Category 3	H412: Harmful to aquatic life with long lasting effects.
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##### Hazard summary

**Physical Hazards:** Flammable aerosol.

#### 2.2 Label Elements



**Signal Words:** Danger

**Product name:** Rivolta F.L. 1000 Spray

**Hazard Statement(s):** H222: Extremely flammable aerosol.  
H229: Pressurized container: May burst if heated.  
H412: Harmful to aquatic life with long lasting effects.

#### 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.  
P273: Avoid release to the environment.

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

**Disposal:** P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

#### 2.3 Information on 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.

#### Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### Results of PBT and vPvB assessment:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 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% - <100,00%	01-2119486944-21	
Butane (<0,1% 1,3-butadiene)	EINECS: 203-448-7	0% - <100,00%	01-2119474691-32	
Isobutane (<0,1% 1,3-butadiene)	EINECS: 200-857-2	0% - <100,00%	01-2119485395-27	
Hydrocarbons, low viscous	EC: 923-037-2	2,50% - <5,00%	01-2119471991-29	

\* 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.

**Product name:** Rivolta F.L. 1000 Spray

### Classification

Chemical name	Identifier	Classification
Propane	EINECS: 200-827-9	CLP: Flam. Gas 1A;H220, Press. Gas Compr. Gas;H280
Butane (<0,1% 1,3-butadiene)	EINECS: 203-448-7	CLP: Flam. Gas 1A;H220, Press. Gas Compr. Gas;H280
Isobutane (<0,1% 1,3-butadiene)	EINECS: 200-857-2	CLP: Flam. Gas 1A;H220, Press. Gas Compr. Gas;H280
Hydrocarbons, low viscous	EC: 923-037-2	CLP: Flam. Liq. 3;H226, Asp. Tox. 1;H304, Aquatic Chronic 2;H411 EUH066

CLP: Regulation No. 1272/2008.

### 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:** Rinse mouth thoroughly.

**4.2 Most important symptoms and effects, both acute and delayed:** 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

#### 5.1 Extinguishing media

**Suitable extinguishing media:** CO<sub>2</sub>, 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.

**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:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Product name:** Rivolta F.L. 1000 Spray

## SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures:** Keep away from sources of ignition - No smoking.
- 6.2 Environmental Precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe to do so.
- 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.

## SECTION 7: Handling and storage:

- 7.1 Precautions for safe handling:** 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:** Local regulations concerning handling and storage of waterpolluting products have to be followed. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. 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
- Storage Class:** 2 B, Aerosols

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

#### Occupational Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
Propane	AGW	1.000 ppm 1.800 mg/m <sup>3</sup>	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (01 2012)
Butane (<0,1% 1,3-butadiene)	AGW	1.000 ppm 2.400 mg/m <sup>3</sup>	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (01 2012)
Isobutane (<0,1% 1,3-butadiene)	AGW	1.000 ppm 2.400 mg/m <sup>3</sup>	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (01 2012)
Hydrocarbons, low viscous	AGW	600 ml/m <sup>3</sup>	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended

### 8.2 Exposure controls

**Product name:** Rivolta F.L. 1000 Spray

**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 butyl rubber (NBR).  
 Min. Breakthrough time:  $\geq 480$  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/vapors/spray. Provide adequate ventilation. In case of inadequate ventilation wear respiratory protection. Filter AX/P2.

**Thermal hazards:** Not known.

**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

<b>Physical state:</b>	Aerosol
<b>Form:</b>	Aerosol
<b>Color:</b>	Colorless
<b>Odor:</b>	Slight
<b>pH:</b>	substance/mixture is non-soluble (in water)
<b>Freezing point:</b>	-15 °C

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<b>Boiling Point:</b>	not determined
<b>Flash Point:</b>	< -60 °C (DIN EN ISO 2719)
<b>Flammability (solid, gas):</b>	not determined
<b>Explosion Limit - Upper (%):</b>	Not applicable for mixtures
<b>Explosion Limit - Lower (%):</b>	Not applicable for mixtures
<b>Vapor pressure:</b>	Not applicable for mixtures
<b>Relative vapor density:</b>	Not applicable for mixtures
<b>Density:</b>	0,86 g/cm <sup>3</sup> (15 °C) (DIN 51757)
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	The product is insoluble in water.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	Not applicable for mixtures
<b>Auto-ignition temperature:</b>	not determined
<b>Decomposition Temperature:</b>	not determined
<b>Kinematic viscosity:</b>	1.500 mm <sup>2</sup> /s (40 °C, DIN 51562)
<b>Particle characteristics:</b>	Not applicable
<b>9.2 Other information</b>	No data available.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity:</b>	Stable under normal use conditions.
<b>10.2 Chemical Stability:</b>	Stable under normal use conditions.
<b>10.3 Possibility of hazardous reactions:</b>	Stable under normal use conditions.
<b>10.4 Conditions to avoid:</b>	Stable under normal use conditions.
<b>10.5 Incompatible Materials:</b>	Strong oxidizing substances. Strong acids. Strong bases.
<b>10.6 Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

##### Oral

**Product:** Not classified for acute toxicity based on available data.

##### Specified substance(s)

Hydrocarbons, low viscous      LD 50 (Rat): > 5.000 mg/kg (OECD 401)

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**Dermal**

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s)**

Hydrocarbons, low vis-  
cous LD 50 (Rabbit): > 5.000 mg/kg (OECD 402)

**Inhalation**

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s)**

Butane (<0,1% 1,3-  
butadiene) LC 50 (Rat, 4 h): 658 mg/l Gas

Hydrocarbons, low vis-  
cous LC 50 (Rat, 4 h): > 5,6 mg/l Dust and mist

**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.

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

**11.2 Information on other hazards**

**Endocrine disrupting properties**

**Product:** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**Product name:** Rivolta F.L. 1000 Spray

## SECTION 12: Ecological information

### 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 viscous 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

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

**Chronic ToxicityProduct:** Based on available data, the classification criteria are met.

#### Fish

##### Specified substance(s)

Hydrocarbons, low viscous NOEC (Fish, 28 d): 0,192 mg/l

#### Aquatic Invertebrates

##### Specified substance(s)

Hydrocarbons, low viscous NOEC (Water Flea, 21 d): < 1 mg/l (OECD 211)

#### Toxicity to Aquatic Plants

##### Specified substance(s)

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

Hydrocarbons, low viscous EC 50 (Alga, 72 h): > 1.000 mg/l (OECD 201)  
NOEC (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 viscous 31,3 % (28 d, OECD 301E) Inherently biodegradable

## 12.3 Bioaccumulative potential

**Product:** Not applicable for mixtures



**Product name:** Rivolta F.L. 1000 Spray

#### 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 Endocrine disrupting properties

**Product:** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### 12.7 Other adverse effects:

Harmful to aquatic life with long lasting effects.

**Water Hazard Class (WGK):**

WGK 1: slightly water-endangering.

### 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 hazardous substances.

### SECTION 14: Transport information

#### ADR/RID

- |                                    |          |
|------------------------------------|----------|
| 14.1 UN number or ID 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: | —        |

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#### IMDG

14.1 UN number or ID 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 or ID 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 Maritime transport in bulk according to IMO instruments:** Not applicable.

### SECTION 15: Regulatory information

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

#### EU Regulations

**EU. Regulation 2024/590/EC on substances that deplete the ozone layer, Annex I, Controlled Substances:** none

**EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended:** none

**Regulation (EC) No. 649/2012 Import and export of dangerous chemicals:** none

#### National Regulations

**Water Hazard Class (WGK):** WGK 1: slightly water-endangering.

**15.2 Chemical safety assessment:** No Chemical Safety Assessment has been carried out.

### SECTION 16: Other information

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

**Product name:** Rivolta F.L. 1000 Spray

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**Wording of the H-statements in section 2 and 3**

EUH066	Repeated exposure may cause skin dryness or cracking.
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H226	Flammable liquid and vapor.
H229	Pressurized container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**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. The following evaluation methods were used: - On the basis of test data - Calculation Method - Bridging Principle "Substantially similar mixtures" - Expert Judgement

**Revision Date:**

14.01.2025

**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.

**Abbreviations and acronyms:**

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EIGA - European Industrial Gases Association; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance;

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PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative