

# 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 K.S.P. 150 Spray

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

Identified uses: Anticorrosion product

**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

Telephone: +49 (0)203 / 9923-0

Contact Person: Bremer & Leguil GmbH - Product Safety Management

E-mail: product-safety-management@bremer-lequil.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** 

Aerosols Category 1 H222: Extremely flammable aerosol.

H229: Pressurized container: May burst if heated.

**Health Hazards** 

Aspiration Hazard Category 1 H304: May be fatal if swallowed and enters air-

ways.

**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.

**Ingestion:** If ingested, material may be aspirated into the lungs and cause chemical

pneumonitis. Treat appropriately.

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#### 2.2 Label Elements



Signal Words: Danger

**Hazard Statement(s):** H222: Extremely flammable aerosol.

H229: Pressurized 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 Information on other haz-

ards

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 envi-

ronment without control.

**Endocrine disrupting prop-**

erties

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.

## **SECTION 3: Composition/information on ingredients**

### 3.2 Mixtures

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

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Chemical name	Identifier	Concentration *	REACH Registra- tion No.	Notes	
Propane	EINECS: 200-827-9	0% - <30,00%	01-2119486944-21		
Butane	EINECS: 203-448-7	0% - <30,00%	01-2119474691-32		
Isobutane (<0,1% 1,3-butadiene)	EINECS: 200-857-2	0% - <30,00%	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 viscous	EC: 918-167-1	10,00% - <20,00%	01-2119472146-39		
Ca Sulfonate	EC: 939-717-7	1,00% - <5,00%	01-2119980985-16		

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### Classification

Chemical name	Identifier	Classi	Classification		
Propane	EINECS: 200-827-9	CLP:	Flam. Gas 1A;H220, Press. Gas Compr. Gas;H280		
Butane	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 viscosity	EINECS: 927-285-2		Asp. Tox. 1;H304 EUH066		
Hydrocarbons, low viscosity	EINECS: 920-901-0		Asp. Tox. 1;H304 EUH066		
Hydrocarbons, low viscous	EC: 918-167-1		Asp. Tox. 1;H304, Aquatic Chronic 4;H413 EUH066		
Ca Sulfonate	EC: 939-717-7	CLP:	Eye Irrit. 2;H319, Skin Irrit. 2;H315		

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:** 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**

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PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.



5.1 Extinguishing media

Suitable extinguishing me-

dia:

CO2, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant add-

ed

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 proce-

dures:

Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated fire fighting water inaccordance 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.

### **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. 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.

#### **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:

Store locked up. 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.

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**7.3 Specific end use(s):** Not applicable

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Storage Class: 2 B, Aerosols

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control Parameters

**Occupational Exposure Limits** 

Chemical name	Туре	Exposure Limit Val	ues	Source
Hydrocarbons, low viscosity	AGW	600	) mg/m3	Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG), as amended (2011)
Hydrocarbons, low viscosity	AGW	300	) mg/m3	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended
Propane	AGW	1.000 ppm 1.800	) mg/m3	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (01 2012)
Butane	AGW	1.000 ppm 2.400	) mg/m3	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (01 2012)
Isobutane (<0,1% 1,3-butadiene)	AGW	1.000 ppm 2.400	) mg/m3	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (01 2012)

#### 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 equip-

ment 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 ad-

hered to inhandling 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: >= 480 min

Recommended thickness of the material: >= 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 manufactur-

er of the protective gloves and has to be observed.

Other: Do not carry cleaning cloths impregnated with the product in trouser pock-

ets. Wear suitable protective clothing.

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Respiratory Protection: Do not breathe dust/fume/gas/mist/vapors/spray. Provide adequate ventila-

tion. 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 foot-

wear 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:AerosolsForm:AerosolsColor:Amber

Odor: Characteristic

**pH:** substance/mixture is non-soluble (in water)

Freezing point: not determined Boiling Point: not determined

**Flash Point:** < -60 °C (DIN EN ISO 2719) **Evaporation Rate:** Not applicable for mixtures

Flammability (solid, gas): not determined

Flammability Limit - Upper (%)—:

Flammability Limit - Lower (%)—:

Vapor pressure:

Relative vapor density:

Density:

Not applicable for mixtures

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:not determinedDecomposition Temperature:not determined

**Kinematic viscosity:**3,1 mm2/s (40 °C, DIN 51562) **Explosive properties:**Value not relevant for classification

Value not relevant for classification

Particle characteristics:Not applicable9.2 Other informationNo data available.

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**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.

**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 oth-

er 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 vis-

cosity

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

Hydrocarbons, low vis-

cosity

LD 50 (Rat): > 10.000 mg/kg

Hydrocarbons, low vis-

cous

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 vis-

cosity

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

Hydrocarbons, low vis-

cous

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 vis-

cosity

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

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**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:** May be fatal if swallowed and enters airways.

11.2 Information on other haz-

ards

**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.

**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 vis- LC 50 (Fish, 96 h): > 1.000 mg/l

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cosity

Hydrocarbons, low vis-

cosity

LC 50 (Fish, 96 h): > 101 mg/l

Hydrocarbons, low vis-

cous

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 vis-

cosity

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

Hydrocarbons, low vis-

cous

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 vis-

cosity

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

Hydrocarbons, low vis-

cous

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 vis-

cosity

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.

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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:** No data available.

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 195014.2 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: -

**IMDG** 

14.1 UN number or ID number: UN 195014.2 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: –

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**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 1005/2009/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

**National Regulations** 

**Water Hazard Class** 

(WGK):

WGK 1: slightly water-endangering.

15.2 Chemical safety as-

sessment:

No Chemical Safety Assessment has been carried out.

## **SECTION 16: Other information**

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

## 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.

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.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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. The following evaluation methods were used: - On the basis of test data - Calculation Method - Bridging Principle "Substantially simi-

lar mixtures" - Expert Judgement

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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

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