

## 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 S.K.S. 48 Spray

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

**Identified uses:** Metal working fluid

**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@bremer-leguil.de

**1.4 Emergency telephone number:** +49 (0)613119240 (Giftinformationszentrum Mainz 00:00-24:00)

### 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.

##### Hazard summary

**Physical Hazards:** Flammable aerosol.

#### 2.2 Label Elements



**Signal Words:** Danger

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

**Product name:** Rivolta S.K.S. 48 Spray

### 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.

### 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.

## 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% - <50,00%	01-2119486944-21	
Butane	EINECS: 203-448-7	0% - <50,00%	01-2119474691-32	
Isobutane (<0,1% 1,3-butadiene)	EINECS: 200-857-2	0% - <50,00%	01-2119485395-27	
Thiadiazol derivative	EINECS: 939-692-2	1,00% - <5,00%	01-2119983498-16	
phosphoric ester derivative	EINECS: 279-632-6	1,00% - <2,50%	01-2119976322-36	

\* 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.

### Classification

Chemical name	Identifier	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
Thiadiazol derivative	EINECS: 939-692-2	CLP: Aquatic Chronic 3;H412
phosphoric ester derivative	EINECS: 279-632-6	CLP: Skin Irrit. 2;H315, Eye Irrit. 2;H319, Aquatic Chronic 2;H411

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

**Product name:** Rivolta S.K.S. 48 Spray

<b>Inhalation:</b>	Supply fresh air; consult doctor in case of symptoms.
<b>Eye contact:</b>	Promptly wash eyes with plenty of water while lifting the eye lids.
<b>Skin Contact:</b>	Wash with soap and water.
<b>Ingestion:</b>	Rinse mouth thoroughly.
<b>4.2 Most important symptoms and effects, both acute and delayed:</b>	Dizziness Freeze burns
<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	Get medical attention if symptoms occur.

## SECTION 5: Firefighting measures

<b>General Fire Hazards:</b>	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.
<b>5.1 Extinguishing media</b>	
<b>Suitable extinguishing media:</b>	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
<b>Unsuitable extinguishing media:</b>	Water with a full water jet.
<b>5.2 Special hazards arising from the substance or mixture:</b>	Danger of explosion with aerosol cans.
<b>5.3 Advice for firefighters</b>	
<b>Special fire-fighting procedures:</b>	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.
<b>Special protective equipment for fire-fighters:</b>	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

<b>6.1 Personal precautions, protective equipment and emergency procedures:</b>	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.
<b>6.2 Environmental Precautions:</b>	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.

**Product name:** Rivolta S.K.S. 48 Spray

- 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:** 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
- 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
Butane	AGW	1.000 ppm 2.400 mg/m <sup>3</sup>	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (01 2012)
Propane	AGW	1.000 ppm 1.800 mg/m <sup>3</sup>	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**

**Product name:** Rivolta S.K.S. 48 Spray

<b>General information:</b>	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.
<b>Eye/face protection:</b>	Avoid contact with skin and eyes. Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield.
<b>Skin protection</b>	
<b>Hand Protection:</b>	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.
<b>Other:</b>	Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.
<b>Respiratory Protection:</b>	Do not breathe dust/fume/gas/mist/vapors/spray. Provide adequate ventilation. In case of inadequate ventilation wear respiratory protection. Filter AX/P2.
<b>Thermal hazards:</b>	Not known.
<b>Hygiene measures:</b>	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.
<b>Environmental Controls:</b>	No data available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state:</b>	Aerosols
<b>Form:</b>	Aerosols
<b>Color:</b>	Pale yellow
<b>Odor:</b>	Slight
<b>pH:</b>	substance/mixture is non-soluble (in water)
<b>Freezing point:</b>	not determined
<b>Boiling Point:</b>	not determined
<b>Flash Point:</b>	$< -60$ °C (DIN EN ISO 2719)
<b>Evaporation Rate:</b>	Not applicable for mixtures
<b>Flammability (solid, gas):</b>	not determined
<b>Flammability Limit - Upper (%)–:</b>	Not applicable for mixtures
<b>Flammability Limit - Lower (%)–:</b>	Not applicable for mixtures
<b>Vapor pressure:</b>	Not applicable for mixtures

**Product name:** Rivolta S.K.S. 48 Spray

<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>Autoignition Temperature:</b>	not determined
<b>Decomposition Temperature:</b>	not determined
<b>Kinematic viscosity:</b>	50 mm <sup>2</sup> /s (40 °C, DIN 51562)
<b>Explosive properties:</b>	Value not relevant for classification
<b>Oxidizing properties:</b>	Value not relevant for classification
<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)

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

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

###### Dermal

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

**Product name:** Rivolta S.K.S. 48 Spray

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**Inhalation**

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

**Specified substance(s)**

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

**Skin Corrosion/Irritation:**

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

**Specified substance(s)**

Thiadiazol derivative OECD 404 (Rabbit):  
Not irritant.

phosphoric ester deriva- OECD 404 (Rabbit):  
tive Irritating.

**Serious Eye Damage/Eye Irritation:**

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

**Specified substance(s)**

Thiadiazol derivative OECD 405 (Rabbit):  
Not irritant.

phosphoric ester deriva- OECD 405 (Rabbit):  
tive Irritating.

**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.

**Specified substance(s)**

Thiadiazol derivative No sensitizing effect (guinea pig); OECD 406

phosphoric ester deriva- No sensitizing effect (guinea pig); OECD 406  
tive

**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.

**Product name:** Rivolta S.K.S. 48 Spray

## 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.

## 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
Thiadiazol derivative	LC 50 (Fish, 96 h): > 1.001 mg/l
phosphoric ester derivative	LC 50 (Fish, 96 h): 5,5 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
Thiadiazol derivative	EC 50 (Water Flea, 48 h): 41 mg/l (OECD 202)
phosphoric ester derivative	EC 50 (Water Flea, 48 h): 1,2 mg/l (OECD 202)

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

#### Aquatic Invertebrates

##### Specified substance(s)

phosphoric ester derivative	NOEC (Water Flea, 21 d): > 10 mg/l (OECD 211)
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#### Toxicity to Aquatic Plants

##### Specified substance(s)

Isobutane (<0,1% 1,3-butadiene)	EC 50 (Alga, 72 h): 8,6 mg/l
Thiadiazol derivative	EC 50 (Alga, 72 h): > 101 mg/l (OECD 201)
phosphoric ester derivative	EL50 (Alga, 72 h): > 10 mg/l (OECD 201)

### 12.2 Persistence and Degradability

**Product name:** Rivolta S.K.S. 48 Spray

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**Biodegradation**

<b>Product:</b>	Not applicable for mixtures
<b>Specified substance(s)</b>	
Thiadiazol derivative	0 % (28 d)
phosphoric ester derivative	12 % (28 d, OECD 301B) 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 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.

<b>SECTION 13: Disposal considerations</b>
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**13.1 Waste treatment methods**

**General information:** Dispose in accordance with all applicable regulations.

**Disposal methods:** Do not empty into drains; dispose of this material and its container in a safe way. When storing used products, ensure that the waste categories and mixing instructions are observed.

**European Waste Codes**

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

**Product name:** Rivolta S.K.S. 48 Spray

#### 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:	–

##### 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 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.

**Product name:** Rivolta S.K.S. 48 Spray

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**15.2 Chemical safety assessment:**

No Chemical Safety Assessment has been carried out.

**SECTION 16: Other information**

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**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	Pressurized container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
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:**

02.12.2022

**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.