

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. 40 Spray
1.2 Relevant identified uses of the sub	ostance 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	v 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-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		
Aerosols	Category 1	H222: Extremely flammable aerosol. H229: Pressurized container: May burst if heated.
Herend commences.		

Hazard summary Physical Hazards:

No data available.

2.2 Label Elements



Signal Words:

Danger



Hazard Statement(s):	H222: Extremely flammable aerosol. H229: Pressurized container: May burst if heated.	
Precautionary Statemen	ts	
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 haz- ards	The product may not be released into the environment 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 Com- mission 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		REACH Registra- tion No.	Notes
Propane	EINECS: 200-827-9	0% - <100,00%	01-2119486944-21	
Butane	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	

* 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	Class	ification
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
CLP: Regulation No. 1272/2008			•

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:	May cause skin and eye irritation.		
4.3 Indication of any immediate medical attention and spe- cial treatment needed	Get medical attention if symptoms occur.		
SECTION 5: Firefighting measures	5		
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 mix- ture:	During fire, gases hazardous to health may be formed.		
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 equip- ment for fire-fighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.		
SECTION 6: Accidental release me	easures		
6.1 Personal precautions, pro- tective 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 in- formed 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 ma- terial, if this is without risk. Dispose of the material collected according to regulations.		
6.4 Reference to other sec- tions:	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 han- dling:	Provide adequate ventilation. Observe good industrial hygiene practices. Do not eat, drink or smoke when working with the product. Take usual pre- cautions when handling mineral oil products or chemical products.
7.2 Conditions for safe storage, including any incompatibili- ties:	Local regulations concerning handling and storage of waterpolluting prod- ucts have to be followed.
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	Туре	Exposure Limit Values	Source
Butane	AGW	1.000 ppm 2.400 mg/m3	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (01 2012)
Propane	AGW	1.000 ppm 1.800 mg/m3	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (01 2012)
Chemical name	Туре	Exposure Limit Values	Source
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 accord- ing 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 recom- mended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety direc- tions. 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.
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:	Aerosols
Form:	Aerosols
Color:	Green yellow
Odor:	Slight
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 (%)–:	Not applicable for mixtures
Flammability Limit - Lower (%)–:	Not applicable for mixtures
Vapor pressure:	Not applicable for mixtures
Relative vapor density:	Not applicable for mixtures
Density:	0,84 g/cm3 (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:	not determined



not determined
30 mm2/s (20 °C, DIN 51562)
Value not relevant for classification
Value not relevant for classification
Not applicable
No data available.

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.
Dermal Product:	Not classified for acute toxicity based on available data.
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.
Serious Eye Damage/Eye Irı Product:	ritation: Based on available data, the classification criteria are not met.



Product name: Rivolta S.K.S. 40 S	pray
Respiratory or Skin Sensiti Product:	zation: 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 Toxic Product:	city - Single Exposure Based on available data, the classification criteria are not met.
Specific Target Organ Toxic Product:	city - Repeated Exposure 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 haz- ards	
Endocrine disrupting proper Product:	ties The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Com- mission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
SECTION 12: Ecological information	tion
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
Aquatic Invertebrates Specified substance(s)	

Specified substance(s)	
lsobutane (<0,1% 1,3- butadiene)	EC 50 (Water Flea, 48 h): 16,3 mg/l

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) 12.2 Persistence and Degradabil	EC 50 (Alga, 72 h): 8,6 mg/l
Biodegradation Product:	Not applicable for mixtures
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 Com- mission 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:	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



SECTION 14: Transport information

ADR/RID

ADIMID	
14.1 UN number or ID number: 14.2 UN Proper Shipping Name: 14.3 Transport Hazard Class(es)	UN 1950 AEROSOLS
Class:	2
Label(s):	2.1
Hazard No. (ADR): Tunnel restriction code:	_ (D)
14.4 Packing Group: 14.5 Environmental hazards:	-
14.5 Environmental nazards: 14.6 Special precautions for user:	-
IMDG	
14.1 UN number or ID number:	UN 1950
14.2 UN Proper Shipping Name: 14.3 Transport Hazard Class(es)	AEROSOLS
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: 14.2 Proper Shipping Name:	UN 1950 Aerosols, flammable
14.3 Transport Hazard Class(es):	Aerosois, naminable
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 1: slightly water-endangering.
(WGK):	



15.2 Chemical safety as-	No Chemical Safety Assessment has been carried out.
sessment:	

SECTION 16: Other information

Revision Information:	Vertical lines in the margin indicate an amendment.
Wording of the H-stater H220 H222 H229 H280	ments in section 2 and 3 Extremely flammable gas. Extremely flammable aerosol. Pressurized container: May burst if heated. Contains gas under pressure; may explode if heated.
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
Revision Date: Disclaimer:	02.12.2022 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 de- duced 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 pro- cessing, 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 sig- nature.