

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.D. 3602 Spray
1.2 Relevant identified uses of the su	bstance or mixture and uses advised against
Identified uses:	Lubricating grease
Uses advised against:	No uses advised against identified.
1.3 Details of the supplier of the safet	y 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.
Health Hazards		
Skin irritation	Category 2	H315: Causes skin irritation.
Aspiration Hazard	Category 1	H304: May be fatal if swallowed and enters air- ways.
Environmental Hazards		
Chronic hazards to the aque environment	atic Category 3	H412: Harmful to aquatic life with long lasting effects.
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. H315: Causes skin irritation. H412: Harmful to aquatic life with long lasting effects.
Precautionary Statemen	ts
General information:	P101: If medical advice is needed, have product container or label at hand. 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. P280: Wear protective gloves/protective clothing/eye protection/face protection.
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 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 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 active ingredients with propellant



Chemical name	Identifier		REACH Registra- tion No.	Notes
Butane	EINECS: 203-448-7	0% - <100,00%	01-2119474691-32	
Propane	EINECS: 200-827-9	0% - <100,00%	01-2119486944-21	
Isobutane (<0,1% 1,3-butadiene)	EINECS: 200-857-2	0% - <100,00%	01-2119485395-27	
Hydrocarbons, low viscous	EC: 921-024-6	10,00% - <20,00%	01-2119475514-35	

* 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
Butane	EINECS: 203-448-7	CLP:	Flam. Gas 1A;H220, Press. Gas Compr. Gas;H280
Propane	EINECS: 200-827-9	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: 921-024-6	CLP:	Flam. Liq. 2;H225, Asp. Tox. 1;H304, Skin Irrit. 2;H315, STOT SE 3;H336, 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 measu Inhalation:	Ires Supply fresh air; consult doctor in case of symptoms.
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Skin Contact:	Immediately flush with plenty of water for at least 15 minutes while remov- ing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.
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. Call a POISON CENTER or doctor/ physician if you feel unwell.
4.2 Most important symptoms and effects, both acute and delayed:	Causes skin irritation. 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 spe- cial treatment needed	Get medical attention if symptoms occur.
SECTION 5: Firefighting measures	S

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 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:	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 equip- ment for fire-fighters:	Firefighters must use standard protective equipment including flame retard- ant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.		
SECTION 6: Accidental release m	easures		
6.1 Personal precautions, pro- tective 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. Do not touch damaged containers or spilled material unless wear- ing appropriate protective clothing. Keep unauthorized personnel away. 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	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		

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.

regulations.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

SECTION 7: Handling and storage:

up:

7.1 Precautions for safe han-	Keep away from heat, hot surfaces, sparks, open flames and other ignition
dling:	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 min-
	eral oil products or chemical products. Avoid contact with skin. Wash hands
	thoroughly after handling. Avoid contact with flame and heat source, pre-
	vent contact with direct sunlight Use only in well-ventilated areas.



7.2 Conditions for safe storage, including any incompatibili- ties:	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
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)

8.2 Exposure controls

Appropriate engineering controls:	Provide adequate ventilation. Ventilation rates should be matched to condi- tions. 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 air- borne levels to an acceptable level.
Individual protection measure	es, 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:	Safety glasses (EN 166) recommended during refilling. Avoid contact with eyes.
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 pockets. Wear suitable protective clothing.



Respiratory Protection:	Ensure good ventilation/exhaustion at the workplace. Avoid breathing vapour/ aerosol.
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

1 2	
Appearance	
Physical state:	Aerosols
Form:	Aerosols
Color:	Light brown
Odor:	Slight
pH:	substance/mixture is non-soluble (in water)
Freezing point:	not determined
Boiling Point:	not determined
Flash Point:	< 0 °C
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)
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
Decomposition Temperature:	not determined
Flow time	Value not relevant for classification
Explosive properties:	Value not relevant for classification
Oxidizing properties:	Value not relevant for classification
Particle characteristics:	Not applicable
Other information	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity:

10.2 Chemical Stability:

Stable under normal use conditions.

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 inform	nation
Information on likely routes Inhalation:	of exposure No data available.
Ingestion:	No data available.
Skin Contact:	Causes skin irritation.
Eye contact:	No data available.
11.1 Information on hazard class	es 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 met.
Serious Eye Damage/Eye Irr Product:	itation: Based on available data, the classification criteria are not met.
Respiratory or Skin Sensitiz Product:	ation: 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 Toxicit Product:	t y - Single Exposure Based on available data, the classification criteria are not met.
Specific Target Organ Toxici Product:	t y - Repeated Exposure 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 propertion Product:	es 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

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- cous	LC 50 (Fish, 96 h): 11,4 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- cous	LC 50 (Water Flea, 48 h): 3 mg/l (OECD 202)
Chronic ToxicityProduct:	Based on available data, the classification criteria are 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- cous	LC 50 (Alga, 72 h): 30 mg/l (OECD 201)
12.2 Persistence and Degradabili	ty
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:	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

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 assessment: 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-stater	nents in section 2 and 3
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly 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.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
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 simi- lar mixtures" - Expert Judgement
Revision Date: Disclaimer:	23.12.2022 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.