

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.R.K.
1.2 Relevant identified uses of the sub	stance or mixture and uses advised against
Identified uses:	Solvent-based cleaner For commercial use only
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-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.

Health Hazards Aspiration Hazard	Category 1	H304: May be fatal if swallowed and enters air- ways.
Hazard summary Physical Hazards:	Can form flammable va	pour-air mixtures during the application.
Health Hazards		
Skin Contact:	At long or repeated con degreasing effect of the	tact with skin it may cause dermatitis due to the solvent.
Ingestion:	lf ingested, material ma pneumonitis. Treat appr	y be aspirated into the lungs and cause chemical opriately.

2.2 Label Elements



Contains:	Hydrocarbons, low viscous
Signal Words:	Danger
Hazard Statement(s):	H304: May be fatal if swallowed and enters airways.
Precautionary Statemer	nts
Response:	P301+P310: IF SWALLOWED: Immediately call a POISON CEN- TER/doctor. P331: Do NOT induce vomiting.
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.
Supplemental label info	rmation 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 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 based on volatile aromatic-free hydrocarbons and additives.

Chemical name	Identifier		REACH Registra- tion No.	Notes
Hydrocarbons, low viscous	EC: 918-167-1	20,00% - <50,00%	01-2119472146-39	
Fatty alcohol, ethoxylated	Polymer	0,10% - <1,00%		

* 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	
Hydrocarbons, low viscous	EC: 918-167-1	CLP: Asp. Tox. 1;H304 EUH066	
Fatty alcohol, ethoxylated	Polymer	CLP: Skin Irrit. 2;H315, Aquatic Acute 1;H400, Aqu Chronic 3;H412	atic

CLP: Regulation No. 1272/2008.

Please note that the mineral oils and petroleum distillates used in our products are severely refined and have a DMSO extract < 3% as measured by method IP 346 and are not classified as carcinogenic according to Note L of Annex VI of Regulation EC 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 water and soap; pay attention: skin degreasing product. 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 If ingested, material may be aspirated into the lungs and cause chemical and effects, both acute and pneumonitis. Treat appropriately. Headache. delayed: 4.3 Indication of any immediate Get medical attention if symptoms occur. medical attention and special treatment needed SECTION 5: Firefighting measures **General Fire Hazards:** Use water spray to keep fire-exposed containers cool. 5.1 Extinguishing media Suitable extinguishing me-CO2, fire extinguishing powder or fog like water spraying. Extinguish larger dia: fires with alcohol resistant foam or spray water with suitable surfactant added Unsuitable extinguishing Water with a full water jet. media: 5.2 Special hazards arising Can form explosive vapor-air mixtures at higher temperatures. from the substance or mixture: 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:	In case of spills, beware of slippery floors and surfaces. Keep away from sources of ignition - No smoking.
6.2 Environmental Precautions:	Prevent from spreading (e.g. by binding or oil barriers). 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:	Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust). Dispose of the material collected according to regulations. Stop the flow of material, if this is without risk.
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:	Use only in well-ventilated areas. Risk of vapor concentration on the floor and in low-lying areas. Prevent formation of aerosols. Do not eat, drink or smoke when working with the product. Take usual precautions when han- dling mineral oil products or chemical products. Observe good industrial hygiene practices. Provide adequate ventilation.
7.2 Conditions for safe storage, including any incompatibili- ties:	Store locked up. Local regulations concerning handling and storage of wa- terpolluting products have to be followed. The precautions for storing and handling of flammable liquids have to be kept. Local regulations for com- mon storage of flammable liquids have to be followed.
7.3 Specific end use(s):	Not applicable
Storage Class:	10, Combustible liquids

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name Type Exposure Limit Values Source	
---	--



2-(2-butoxyethoxy) ethyl acetate - Vapor and aerosol.	AGW	10 ppm 67 mg/m3	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (09 2013)
Hydrocarbons, low viscous	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)

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:	Goggles/face shield are recommended.
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:	Do not breathe dust/fume/gas/mist/vapors/spray. Provide adequate ventila- tion. In case of inadequate ventilation wear respiratory protection. Filter A/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:	liquid
Form:	liquid
Color:	Pale yellow
Odor:	Slight
pH:	substance/mixture is non-soluble (in water)
Freezing point:	not determined
Boiling Point:	178 - 250 °C
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:	0,90 g/cm3 (20 °C) (DIN 51757)
Solubility(ies)	
Solubility in Water:	partly soluble
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
9.2 Other information	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.
Specified substance(s) Hydrocarbons, low vis- cous	LD 50 (Rat): > 5.001 mg/kg (OECD 401)
Dermal Product:	Not classified for acute toxicity based on available data.
Specified substance(s) Hydrocarbons, low vis- cous	LD 50 (Rabbit): > 5.001 mg/kg (OECD 402)
Inhalation Product:	Not classified for acute toxicity based on available data.
Specified substance(s) Hydrocarbons, low vis- cous	LC 50 (Rat, 4 h): > 5 mg/l (OECD 403)
Skin Corrosion/Irritation: Product: Specified substance(s)	Based on available data, the classification criteria are not met.
Hydrocarbons, low vis- cous	Repeated exposure may cause skin dryness or cracking.
Fatty alcohol, ethoxylated	OECD 404 (Rabbit): Irritating.
Serious Eye Damage/Eye Irr Product: Specified substance(s)	itation: Based on available data, the classification criteria are not met.
Hydrocarbons, low vis- cous	Based on available data, the classification criteria are not met.
Fatty alcohol, ethoxylated	OECD 405 (Rabbit): Not irritant.



Respiratory or Skin Sensitiza 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.
Specified substance(s) Hydrocarbons, low vis- cous	Based on available data, the classification criteria are not met.
Fatty alcohol, ethoxylated	No sensitizing effect (guinea pig); OECD 406
Germ Cell Mutagenicity Product: In vitro Specified substance(s) Hydrocarbons, low vis- cous	Based on available data, the classification criteria are not met.
	Based on available data, the classification criteria are not met.
In vivo Specified substance(s) Hydrocarbons, low vis- cous	Based on available data, the classification criteria are not met.
Carcinogenicity Product: Specified substance(s) Hydrocarbons, low vis- cous	Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.
Reproductive toxicity Product: Specified substance(s) Hydrocarbons, low vis- cous	Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.
Specific Target Organ Toxici Product: Specified substance(s) Hydrocarbons, low vis-	Based on available data, the classification criteria are not met.
cous Specific Target Organ Toxici Product: Specified substance(s) Hydrocarbons, low vis- cous	Based on available data, the classification criteria are not met. ty - Repeated Exposure Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.
Aspiration Hazard Product: Specified substance(s) Hydrocarbons, low vis- cous	May be fatal if swallowed and enters airways. 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) Hydrocarbons, low vis- cous	LC 50 (Fish, 96 h): > 1.000 mg/l (OECD 203)	
Fatty alcohol, ethoxylated	LC 50 (Fish, 96 h): 1,3 mg/l	
Aquatic Invertebrates Specified substance(s) 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.	
Aquatic Invertebrates Specified substance(s) Hydrocarbons, low vis- cous	NOEC (Water Flea, 21 d): > 1 mg/l (OECD 211)	
Toxicity to Aquatic Plants Specified substance(s) Hydrocarbons, low vis- cous	EC 50 (Alga, 72 h): > 1.000 mg/l (OECD 201)	
12.2 Persistence and Degradability		
Biodegradation Product: Specified substance(s) Hydrocarbons, low vis- cous	Not applicable for mixtures	
	31 % (28 d, OECD 301F) Not easily biodegradable	
Fatty alcohol, ethoxylated	95 % (7 d, OECD 302B) Readily biodegradable	
12.3 Bioaccumulative potential		

12.3 Bioaccumulative potential Product:

Not applicable for mixtures



Toudet name. Rivolta O.R.R.	
Specified substance(s) Hydrocarbons, low vis- cous	Not applicable
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 considera	tions
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	
	14 06 03*: other solvents and solvent mixtures
SECTION 14: Transport informat	ion
ADR/RID 14.1 UN number or ID number 14.2 UN Proper Shipping Nam 14.3 Transport Hazard Class(Class:	ne: –

-

_

_

_

Label(s):



IMDG 14.1 UN number or ID number: 14.2 UN Proper Shipping Name: 14.3 Transport Hazard Class(es)	
Class:	Non-dangerous goods
Label(s):	–
EmS No.:	–
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: 14.3 Transport Hazard Class(es): Class: Label(s):	– – Non-dangerous goods –
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 informat	ion
Revision Information:	Vertical lines in the margin indicate an amendment.
Wording of the H-statement	ts in section 2 and 3

EUH066	Repeated exposure may cause skin dryness or cracking.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

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: Disclaimer:

05.12.2022

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 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.