

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 B.R.X. 659	
1.2 Relevant identified uses of the sub	stance or mixture and uses advised against	
Identified uses:	Alkaline cleaner/ detergent 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		
Skin corrosion	Category 1B	H314: Causes severe skin burns and eye dam- age.
Serious eye damage	Category 1	H318: Causes serious eye damage.
Hazard summary Physical Hazards:	•	osive to metals according to the UN Recommenda- of Dangerous Goods, Manual of Tests and Criteria,
Lobal Elemente		

2.2 Label Elements Contains:

Silicate



Signal Words:	Danger
Hazard Statement(s):	H314: Causes severe skin burns and eye damage.
Precautionary Statemen	ts
Prevention:	P280: Wear protective gloves/protective clothing/eye protection/face protection.
Response:	 P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P310: Immediately call a POISON CENTER or doctor/ physician.
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 (strong) alkalinic components, tensides and stabilizers. This product is applied only as solution or emulsion in water.

Chemical name	Identifier		REACH Registra- tion No.	Notes
Silicate	EINECS: 229-912-9	10,00% - <20,00%	01-2119449811-37	
Fatty alcohol, ethoxylated	Polymer	1,00% - <5,00%		

* 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	Class	Classification	
Silicate	EINECS: 229-912-9	CLP:	Met. Corr. 1;H290, Skin Corr. 1B;H314, Acute Tox. 4;H302, Acute Tox. 4;H332, STOT SE 3;H335	
Fatty alcohol, ethoxylated	Polymer	CLP:	Eye Irrit. 2;H319	
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	ires		
Inhalation:	If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. 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. Destroy or thoroughly clean contami- nated shoes. Get medical attention.		
Ingestion:	Rinse mouth. Never give liquid to an unconscious person. Do not induce vomiting without advice from poison control center. Seek medical attention.		
4.2 Most important symptoms and effects, both acute and delayed:	Risk of serious damage to eyes. Causes burns.		
4.3 Indication of any immediate medical attention and spe- cial treatment needed	When handing over this safety data sheet, please make the remark: "Cleaner". 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 m	easures	
6.1 Personal precautions, pro- tective equipment and emergency procedures:	Do not touch damaged containers or spilled material unless wearing appro- priate protective clothing. Keep unauthorized personnel away. In case of spills, beware of slippery floors and surfaces.	
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 regula- tions. 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.	
	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		

7.1 Precautions for safe han- dling:	Do not eat, drink or smoke when working with the product. Take usual pre- cautions when handling mineral oil products or chemical products. Observe good industrial hygiene practices. Provide adequate ventilation.
7.2 Conditions for safe storage, including any incompatibili- ties:	Local regulations concerning handling and storage of waterpolluting prod- ucts have to be followed. Provide alkali-resistant floor. Do not use light alloy containers.
7.3 Specific end use(s):	Not applicable
Storage Class:	8 B, Non-combustible corrosive substances

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

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:	Wear eye protection/face protection. Avoid contact with skin and 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:	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:	Yellow
Odor:	Characteristic
pH:	13,0 (100 %, 20 °C, DIN 19268)
Freezing point:	< 0 °C
Boiling Point:	> 100 °C
Flash Point:	Not applicable
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:	1,08 g/cm3 (15 °C) (DIN 51757)
Solubility(ies)	
Solubility in Water:	Miscible with 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
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.
10.6 Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and oth- er toxic gases or vapors.

SECTION 11: Toxicological information

Information on likely routes Inhalation:	of exposure No data available.
Ingestion:	No data available.
Skin Contact:	Causes severe skin burns.
Eye contact:	Causes serious eye damage.

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Oral	
Product:	ATEmix: 10.706 mg/kg
Specified substance(s)	
Silicate	LD 50 (Rat): 1.152 - 1.349 mg/kg



Toduct name. Rivolta D.R.A. 000	
Dermal Product:	Not classified for acute toxicity based on available data.
Specified substance(s) Silicate	LD 50 (Rat): > 5.000 mg/kg
Inhalation Product:	Not classified for acute toxicity based on available data.
Skin Corrosion/Irritation: Product: Specified substance(s) Fatty alcohol, ethoxylated	Based on available data, the classification criteria are met. OECD 404 (Rabbit): Slightly irritating.
Serious Eye Damage/Eye Irri Product: Specified substance(s) Fatty alcohol, ethoxylated	itation: Based on available data, the classification criteria are met. OECD 405 (Rabbit): Irritating.
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.
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 Toxici Product:	ity - Single Exposure Based on available data, the classification criteria are not met.
Specific Target Organ Toxici Product:	ity - 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 properti Product:	ies 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) Silicate	LC 50 (Fish, 96 h): > 2.320 mg/l
Fatty alcohol, ethoxylated	LC 50 (Fish, 96 h): 1,1 mg/l
Aquatic Invertebrates Specified substance(s) Silicate	EC 50 (Water Flea, 48 h): 1.700 mg/l
Fatty alcohol, ethoxylated	EC 50 (Water Flea, 48 h): 1,1 mg/l (OECD 202)
Chronic ToxicityProduct:	Based on available data, the classification criteria are not met.
Toxicity to Aquatic Plants Specified substance(s) Fatty alcohol, ethoxylated	EC 50 (Alga, 72 h): 1,1 mg/l (OECD 201)
12.2 Persistence and Degradabili	ty
Biodegradation Product: Specified substance(s)	Not applicable for mixtures
Fatty alcohol, ethoxylated	> 60 % (28 d, OECD 301B) Readily biodegradable
12.3 Bioaccumulative potential Product: Specified substance(s) Fatty alcohol, ethoxylated	Not applicable for mixtures Bioconcentration Factor (BCF): 13 - 68 Potential to bioaccumulate is low.
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 ClassWGK 1: slightly water-endangering.(WGK):	

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	

07 01 01*: aqueous washing liquids and mother liquors 07 06 01*: aqueous washing liquids and mother liquors

SECTION 14: Transport information

ADR/RID

14.1 UN number or ID number: 14.2 UN Proper Shipping Name: 14.3 Transport Hazard Class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code: 14.4 Packing Group: 14.5 Environmental hazards: 14.6 Special precautions for user:	UN 1719 CAUSTIC ALKALI LIQUID, N.O.S.(Silicate) 8 8 80 (E) II -
IMDG	
14.1 UN number or ID number: 14.2 UN Proper Shipping Name: 14.3 Transport Hazard Class(es) Class: Label(s): EmS No.: 14.3 Packing Group:	UN 1719 CAUSTIC ALKALI LIQUID, N.O.S.(Silicate) 8 8 F-A, S-B II
14.5 Environmental hazards: 14.6 Special precautions for user:	
ΙΑΤΑ	
 14.1 UN number or ID number: 14.2 Proper Shipping Name: 14.3 Transport Hazard Class(es): Class: Label(s): 14.4 Packing Group: 14.5 Environmental hazards: 14.6 Special precautions for user: 	UN 1719 Caustic alkali liquid, n.o.s.(Silicate) 8 8 II –



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

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

National Regulations

Revision Information:	Vertical lines in the margin indicate an amendment.
Wording of the H-statem	ents in section 2 and 3
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
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:	07.12.2022 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.