

**Safety Data Sheet**

according to UK REACH Regulation

**Berger Fresh Tankcleaner**

Revision date: 31.03.2023

Product code: Kba-504

Page 1 of 10

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Berger Fresh Tankcleaner

Product group: Endprodukt  
UFI: KV8G-FPHM-YE07-VAES

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Reinigung Frischwassertank

**1.3. Details of the supplier of the safety data sheet**

Company name: Fritz Berger GmbH  
Street: Fritz-Berger-Str. 1  
Place: D-92318 Neumarkt  
Telephone: +49 (0) 9181 330 100  
e-mail: service@fritz-berger.de

**1.4. Emergency telephone number:** Giftnotrufzentrale Berlin  
+49 30 30686700

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****GB CLP Regulation****Signal word:** Warning**Pictograms:****Hazard statements**

H319 Causes serious eye irritation.

**Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P264 Wash Hände thoroughly after handling.  
P280 Wear Augenschutz.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 If eye irritation persists: Get medical advice/attention.

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures**

**Safety Data Sheet**

according to UK REACH Regulation

**Berger Fresh Tankcleaner**

Revision date: 31.03.2023

Product code: Kba-504

Page 2 of 10

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
5949-29-1	Citric Acid Monohydrate			1 - < 5 %
	201-069-1		01-2119457026-42	
	Eye Irrit. 2; H319			
69011-36-5	Isotridecanol, ethoxylated (9 EO)			1 - < 5 %
	500-241-6			
	Acute Tox. 4, Eye Dam. 1; H302 H318			

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
5949-29-1	201-069-1	Citric Acid Monohydrate	1 - < 5 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 3000 mg/kg		
69011-36-5	500-241-6	Isotridecanol, ethoxylated (9 EO)	1 - < 5 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 500 - 2000 mg/kg		

**Labelling for contents according to Regulation (EC) No 648/2004**

&lt; 5 % non-ionic surfactants, perfumes, preservation agents (Phenoxyethanol).

**SECTION 4: First aid measures**
**4.1. Description of first aid measures**
**After inhalation**

Provide fresh air.

**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

**After contact with eyes**

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

**After ingestion**

Rinse mouth immediately and drink 1 glass of water.

**4.2. Most important symptoms and effects, both acute and delayed**

No information available.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**SECTION 5: Firefighting measures**
**5.1. Extinguishing media**
**Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**5.2. Special hazards arising from the substance or mixture**

Non-flammable.

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Safety Data Sheet**

according to UK REACH Regulation

**Berger Fresh Tankcleaner**

Revision date: 31.03.2023

Product code: Kba-504

Page 3 of 10

**Additional information**

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.  
Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

**6.3. Methods and material for containment and cleaning up****For cleaning up**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

No special measures are necessary.

**Advice on protection against fire and explosion**

No special fire protection measures are necessary.

**Advice on general occupational hygiene**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed.

**Hints on joint storage**

No special measures are necessary.

**7.3. Specific end use(s)**

Reinigung Frischwassertank

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

**Safety Data Sheet**

according to UK REACH Regulation

**Berger Fresh Tankcleaner**

Revision date: 31.03.2023

Product code: Kba-504

Page 4 of 10

**DNEL/DMEL values**

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
69011-36-5	Isotridecanol, ethoxylated (9 EO)		
Worker DNEL, long-term	inhalation	systemic	294 mg/m <sup>3</sup>
Worker DNEL, long-term	dermal	systemic	2080 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	87 mg/m <sup>3</sup>
Consumer DNEL, long-term	dermal	systemic	1250 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	25 mg/kg bw/day

**PNEC values**

CAS No	Substance	
Environmental compartment	Value	
5949-29-1	Citric Acid Monohydrate	
Freshwater	440 mg/l	
Freshwater sediment	3,46 mg/kg	
Marine sediment	34,6 mg/kg	
Micro-organisms in sewage treatment plants (STP)	> 1000 mg/l	
Soil	33,1 mg/kg	
69011-36-5	Isotridecanol, ethoxylated (9 EO)	
Freshwater	0,074 mg/l	
Marine water	0,007 mg/l	
Freshwater sediment	0,604 mg/kg	
Marine sediment	0,06 mg/kg	
Micro-organisms in sewage treatment plants (STP)	1,4 mg/l	
Soil	0,1 mg/kg	

**8.2. Exposure controls**

**Individual protection measures, such as personal protective equipment**
**Eye/face protection**

Suitable eye protection: goggles.

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Skin protection**

Use of protective clothing.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

**Safety Data Sheet**

according to UK REACH Regulation

**Berger Fresh Tankcleaner**

Revision date: 31.03.2023

Product code: Kba-504

Page 5 of 10

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	Liquid	
Colour:	yellow	
Odour:	Lemon	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		100 °C
Flammability:		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		not determined
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value (at 20 °C):		2,6
Water solubility:		easily soluble
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		23 hPa
(at 20 °C)		
Vapour pressure:		123 hPa
(at 50 °C)		
Density (at 20 °C):		1,01 g/cm <sup>3</sup>
Relative vapour density:		not determined

**9.2. Other information****Information with regard to physical hazard classes**

## Explosive properties

The product is not: Explosive.

## Oxidizing properties

The product is not: oxidising.

**Other safety characteristics**

Evaporation rate: not determined

Solid content: not determined

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

No known hazardous reactions.

**10.4. Conditions to avoid**

none

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

No known hazardous decomposition products.

**Safety Data Sheet**

according to UK REACH Regulation

**Berger Fresh Tankcleaner**

Revision date: 31.03.2023

Product code: Kba-504

Page 6 of 10

**SECTION 11: Toxicological information**
**11.1. Information on hazard classes as defined in GB CLP Regulation**
**Acute toxicity**

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

**ATEmix calculated**

ATE (oral) 27777,8 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
5949-29-1	Citric Acid Monohydrate				
	oral	LD50 3000 mg/kg	Rat	Supplier	
	dermal	LD50 > 2000 mg/kg	Rat	ECHA	OECD-Richtlinie 402
69011-36-5	Isotridecanol, ethoxylated (9 EO)				
	oral	LD50 500 - 2000 mg/kg	Rat	Lieferant	
	dermal	LD50 > 2000 mg/kg	Rabbit	ECHA	OECD 402

**Irritation and corrosivity**

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

**STOT-single exposure**

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

**STOT-repeated exposure**

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

**Aspiration hazard**

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

**11.2. Information on other hazards**
**Further information**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

**SECTION 12: Ecological information**
**12.1. Toxicity**

The product is not: Ecotoxic.

**Safety Data Sheet**

according to UK REACH Regulation

**Berger Fresh Tankcleaner**

Revision date: 31.03.2023

Product code: Kba-504

Page 7 of 10

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
5949-29-1	Citric Acid Monohydrate					
	Acute fish toxicity	LC50 440 - 760 mg/l	96 h	Leuciscus idus (golden orfe)	Supplier	OECD 203
	Acute algae toxicity	ErC50 120 mg/l	72 h	Daphnia magna (Big water flea)	Supplier	
69011-36-5	Isotridecanol, ethoxylated (9 EO)					
	Acute fish toxicity	LL50 > 1,1 mg/l	96 h	Fische	ECHA	
	Acute algae toxicity	ErC50 > 10 mg/l	72 h	Desmodesmus subspicatus	Supplier	
	Acute crustacea toxicity	EC50 7,7 mg/l	48 h	Daphnia magna (Big water flea)	Supplier	
	Acute bacteria toxicity	(EC50 140 mg/l)	3 h	Activated sludge	ECHA	

**12.2. Persistence and degradability**

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
5949-29-1	Citric Acid Monohydrate			
	OECD 301 B	97 %	28	
	Zahn-Wellens-Test (OECD 302 B)	98 %		
69011-36-5	Isotridecanol, ethoxylated (9 EO)			
	CO2 evolution	80 %	28	
	leicht biologisch abbaubar			

**12.3. Bioaccumulative potential**

The product has not been tested.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
5949-29-1	Citric Acid Monohydrate	-1,57
69011-36-5	Isotridecanol, ethoxylated (9 EO)	4,73

**12.4. Mobility in soil**

The product has not been tested.

**12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No information available.

**Further information**

Avoid release to the environment.

**SECTION 13: Disposal considerations**

**Safety Data Sheet**

according to UK REACH Regulation

**Berger Fresh Tankcleaner**

Revision date: 31.03.2023

Product code: Kba-504

Page 8 of 10

**13.1. Waste treatment methods****Disposal recommendations**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

**List of Wastes Code - residues/unused products**

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; hazardous waste

**List of Wastes Code - contaminated packaging**

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

**Contaminated packaging**

Wash with plenty of water. Completely emptied packages can be recycled.

**SECTION 14: Transport information****Land transport (ADR/RID)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

**14.7. Maritime transport in bulk according to IMO instruments**

No dangerous good in sense of this transport regulation.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2004/42/EC (VOC): 0,589 % (5,944 g/l)



**Safety Data Sheet**

according to UK REACH Regulation

**Berger Fresh Tankcleaner**

Revision date: 31.03.2023

Product code: Kba-504

Page 9 of 10

 Information according to 2012/18/EU  
(SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

**Additional information**

Regulation (EC) No. 648/2004 [Detergents regulation].

**National regulatory information**

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

1 - slightly hazardous to water

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**
**Abbreviations and acronyms**

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

VOC: Volatile Organic Compounds

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method

**Safety Data Sheet**

according to UK REACH Regulation

**Berger Fresh Tankcleaner**

Revision date: 31.03.2023

Product code: Kba-504

Page 10 of 10

**Relevant H and EUH statements (number and full text)**

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

**Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*