

**Entkalker B15-30**

Revision date: 10 Aug 2023 Version: 3.4 Print date: 10 Aug 2023


**Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)**
**SECTION 1: Identification of the substance/mixture and of the company/undertaking**
**1.1. Product identifier**

Trade name/designation:

**Entkalker B15-30****1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture:**

Washing and cleaning products

**1.3. Details of the supplier of the safety data sheet****Supplier (manufacturer/importer/only representative/downstream user/distributor):****Bartscher GmbH**

Franz-Kleine-Straße 28

33154 Salzkotten

**Telephone:** 0049 (0)5258 971 0**Telefax:** 0049 (0)5258 971 120**E-mail:** info@bartscher.com**Website:** www.bartscher.com**1.4. Emergency telephone number**

Poison emergency Berlin, 24h: +49 (0)30 30686 700

**SECTION 2: Hazards identification**
\* **2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 [CLP]**

Hazard classes and hazard categories	Hazard statements	Classification procedure
Skin corrosion/irritation ( <i>Skin Irrit. 2</i> )	H315: Causes skin irritation.	
Serious eye damage/eye irritation ( <i>Eye Irrit. 2</i> )	H319: Causes serious eye irritation.	
STOT-single exposure ( <i>STOT SE 3</i> )	H335: May cause respiratory irritation.	

**Entkalker B15-30**

Revision date: 10 Aug 2023 Version: 3.4 Print date: 10 Aug 2023

\* **2.2. Label elements****Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms:

**GHS07**

Exclamation mark

**Signal word:** Warning**Hazard components for labelling:**

citric acid

Hazard statements for health hazards	
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

**Supplemental hazard information:** none

Precautionary statements Response	
P302 + P352	IF ON SKIN: Wash with plenty of water-----/Soap.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

**2.3. Other hazards**

No data available

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

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 77-92-9 EC No.: 201-069-1 Index No.: 607-750-00-3 REACH No.: 01-2119457026-42	<b>citric acid</b> Eye Irrit. 2 (H319), STOT SE 3 (H335) ⚠ Warning	25 - 100 weight-%
CAS No.: 5329-14-6 EC No.: 226-218-8 Index No.: 016-026-00-0 REACH No.: 01-2119488633-28	<b>sulphamic acid</b> Aquatic Chronic 3 (H412), Eye Irrit. 2 (H319), Skin Irrit. 2 (H315) ⚠ Warning	5 - 25 weight-%

Full text of H- and EUH-phrases: see section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information:**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated,

**Entkalker B15-30****Revision date:** 10 Aug 2023 **Version:** 3.4 **Print date:** 10 Aug 2023

saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended.

**Following inhalation:**

Provide fresh air. In case of respiratory tract irritation, consult a physician. Get medical advice/attention if you feel unwell.

**In case of skin contact:**

If skin irritation or rash occurs: Get medical advice/attention. After contact with skin, wash immediately with plenty of water and soap.

**After eye contact:**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Following ingestion:**

Rinse mouth. Get medical advice/attention if you feel unwell. Let 1 glass of water be drunken in little sips (dilution effect).

**Self-protection of the first aider:**

Use personal protection equipment.

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

Skin corrosion/irritation Serious eye damage/eye irritation Irritation to respiratory tract

**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.  
Water  
Carbon dioxide (CO<sub>2</sub>)  
Extinguishing powder

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

The product itself does not burn.

**Hazardous combustion products:**

Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide

**5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing.

**5.4. Additional information**

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****6.1.1. For non-emergency personnel****Personal precautions:**

Remove persons to safety.

**Protective equipment:**

Wear protective gloves/protective clothing/eye protection/face protection.

**6.1.2. For emergency responders****Personal protection equipment:**

Personal protection equipment: see section 8

**Entkalker B15-30**

Revision date: 10 Aug 2023 Version: 3.4 Print date: 10 Aug 2023

**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 containment:**

Collect spillage. Measures to prevent aerosol and dust generation Wet clean or vacuum up solids.

**For cleaning up:**

Water

**6.4. Reference to other sections**

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

**6.5. Additional information**

Use appropriate container to avoid environmental contamination.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Protective measures****Advices on safe handling:**

Wear personal protection equipment (refer to section 8). Do not breathe dust.

**Advices on general occupational hygiene**

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes.

**7.2. Conditions for safe storage, including any incompatibilities****Technical measures and storage conditions:**

Keep container tightly closed in a cool, well-ventilated place.

**Requirements for storage rooms and vessels:**

Keep/Store only in original container.

**Storage class (TRGS 510, Germany):** 13 - Non-combustible solids that cannot be assigned to any of the above storage classes**7.3. Specific end use(s)**

No data available

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****8.1.1. Occupational exposure limit values**

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
TRGS 900 (DE) from 7 Jun 2018	<b>citric acid</b> CAS No.: 77-92-9 EC No.: 201-069-1	① 2 mg/m <sup>3</sup> ② 4 mg/m <sup>3</sup> ⑤ (einatembare Fraktion) DFG, Y

**8.1.2. Biological limit values**

No data available

**Entkalker B15-30**

Revision date: 10 Aug 2023 Version: 3.4 Print date: 10 Aug 2023

**8.1.3. DNEL-/PNEC-values**

Substance name	DNEL value	① DNEL type ② Exposure route
<b>sulphamic acid</b> CAS No.: 5329-14-6 EC No.: 226-218-8	70.5 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, systemic effects
<b>sulphamic acid</b> CAS No.: 5329-14-6 EC No.: 226-218-8	10 mg/kg bw/ day	① DNEL worker ② Long-term - dermal, systemic effects

Substance name	PNEC Value	① PNEC type
<b>citric acid</b> CAS No.: 77-92-9 EC No.: 201-069-1	440 mg/L	① PNEC aquatic, freshwater
<b>citric acid</b> CAS No.: 77-92-9 EC No.: 201-069-1	34.6 mg/kg	① PNEC sediment, freshwater
<b>sulphamic acid</b> CAS No.: 5329-14-6 EC No.: 226-218-8	1.8 mg/L	① PNEC aquatic, freshwater
<b>sulphamic acid</b> CAS No.: 5329-14-6 EC No.: 226-218-8	0.18 mg/L	① PNEC aquatic, marine water
<b>sulphamic acid</b> CAS No.: 5329-14-6 EC No.: 226-218-8	8.36 mg/kg	① PNEC sediment, freshwater
<b>sulphamic acid</b> CAS No.: 5329-14-6 EC No.: 226-218-8	0.84 mg/kg	① PNEC sediment, marine water

**8.2. Exposure controls****8.2.1. Appropriate engineering controls**

No data available

**8.2.2. Personal protection equipment****Eye/face protection:**

Eye glasses with side protection EN 166

**Skin protection:**

Tested protective gloves must be worn EN ISO 374 Suitable material: NBR (Nitrile rubber)  
>0,3mm Breakthrough time: 480min In the case of wanting to use the gloves again, clean them before taking off and air them well.

**8.2.3. Environmental exposure controls**

No data available

**SECTION 9: Physical and chemical properties****\* 9.1. Information on basic physical and chemical properties****Appearance****Physical state:** solid**Colour:** white**Odour:** odourless

**Entkalker B15-30**

Revision date: 10 Aug 2023 Version: 3.4 Print date: 10 Aug 2023

**Safety relevant basis data**

Parameter	Value	at °C	① Method ② Remark
pH	2.2	20 °C	② 4 g/l
Melting point	<i>not determined</i>		
Freezing point	<i>not determined</i>		
Initial boiling point and boiling range	<i>not determined</i>		
Decomposition temperature	<i>not determined</i>		
Flash point	<i>not applicable</i>		
Evaporation rate	<i>not determined</i>		
Auto-ignition temperature	<i>not determined</i>		
Upper/lower flammability or explosive limits	<i>not determined</i>		
Vapour pressure	<i>not determined</i>		
Vapour density	<i>not determined</i>		
Density	≈ 1.05 g/cm <sup>3</sup>	20 °C	
Relative density	<i>not determined</i>		
Bulk density	<i>not determined</i>		
Water solubility	completely miscible	20 °C	
Partition coefficient: n-octanol/water	<i>not determined</i>		
Dynamic viscosity	<i>not determined</i>		
Kinematic viscosity	<i>not determined</i>	40 °C	

**particle characteristics:**

not determined

**9.2. Other information**

No data available

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

The product itself does not burn.

**10.2. Chemical stability**

The mixture is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions**

No hazardous reaction when handled and stored according to provisions.

**10.4. Conditions to avoid**

No further relevant information available.

**10.5. Incompatible materials**

Alkali (lye)

**10.6. Hazardous decomposition products**

Thermal decomposition can lead to the escape of irritating gases and vapours.

**Entkalker B15-30**

Revision date: 10 Aug 2023 Version: 3.4 Print date: 10 Aug 2023

**SECTION 11: Toxicological information****\* 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****citric acid** CAS No.: 77-92-9 EC No.: 201-069-1**LD<sub>50</sub> oral:** =11,700 mg/kg (Rat)**LD<sub>50</sub> dermal:** >2,000 mg/kg (Rat)**sulphamic acid** CAS No.: 5329-14-6 EC No.: 226-218-8**LD<sub>50</sub> oral:** =3,160 mg/kg (Rat)**Acute oral toxicity:**

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

**Acute dermal toxicity:**

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

**Acute inhalation toxicity:**

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

**Skin corrosion/irritation:**

Causes skin irritation.

**Serious eye damage/irritation:**

Causes serious eye irritation.

**Respiratory or skin sensitisation:**

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

**Germ cell mutagenicity:**

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

**Carcinogenicity:**

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

**Reproductive toxicity:**

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

**STOT-single exposure:**

May cause respiratory irritation.

**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.

**Additional information:**

No data available

**11.2. Information on other hazards**

No data available

**SECTION 12: Ecological information****12.1. Toxicity****citric acid** CAS No.: 77-92-9 EC No.: 201-069-1**LC<sub>50</sub>:** =440 mg/L 4 d (fish-----, *Leuciscus idus* (golden orfe))**EC<sub>50</sub>:** =1,535 mg/L 2 d (crustaceans, *Daphnia magna* (Big water flea))**sulphamic acid** CAS No.: 5329-14-6 EC No.: 226-218-8**LC<sub>50</sub>:** =70.3 mg/L 4 d (fish-----, *Pimephales promelas* (fathead minnow))**12.2. Persistence and degradability****citric acid** CAS No.: 77-92-9 EC No.: 201-069-1**Biodegradation:** Yes, rapidly

**Entkalker B15-30**

Revision date: 10 Aug 2023 Version: 3.4 Print date: 10 Aug 2023

**sulphamic acid** CAS No.: 5329-14-6 EC No.: 226-218-8**Biodegradation:** not applicable**12.3. Bioaccumulative potential****citric acid** CAS No.: 77-92-9 EC No.: 201-069-1**Log K<sub>ow</sub>:** -1.72**sulphamic acid** CAS No.: 5329-14-6 EC No.: 226-218-8**Log K<sub>ow</sub>:** 0.1**12.4. Mobility in soil**

No data available

**12.5. Results of PBT and vPvB assessment****sulphamic acid** CAS No.: 5329-14-6 EC No.: 226-218-8**Results of PBT and vPvB assessment:** This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

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

**12.6. Endocrine disrupting properties**

No data available

**12.7. Other adverse effects**

No data available

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****13.1.1. Product/Packaging disposal****Waste codes/waste designations according to EWC/AVV****Waste code product**

06 01 99 wastes not otherwise specified

**Waste code packaging**

15 01 06 mixed packaging

**Waste treatment options****Appropriate disposal / Product:**

Consult the appropriate local waste disposal expert about waste disposal.

**Appropriate disposal / Package:**

Completely emptied packages can be recycled.

**SECTION 14: Transport information**

Land transport (ADR/RID)	Inland waterway craft-(ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.1. UN number or ID number</b>			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
<b>14.2. UN proper shipping name</b>			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
<b>14.3. Transport hazard class(es)</b>			
not relevant	not relevant	not relevant	not relevant



**Entkalker B15-30**

Revision date: 10 Aug 2023 Version: 3.4 Print date: 10 Aug 2023

Land transport (ADR/RID)	Inland waterway craft- (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.4. Packing group</b>			
not relevant	not relevant	not relevant	not relevant
<b>14.5. Environmental hazards</b>			
not relevant	not relevant	not relevant	not relevant
<b>14.6. Special precautions for user</b>			
not relevant	not relevant	not relevant	not relevant

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

No data available

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU legislation****Other regulations (EU):**

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: This product is not assigned to a hazard category.  
Volatile organic compounds (VOC) content in percent by weight: 0%

**15.1.2. National regulations** **[DE] National regulations****Störfallverordnung (12. BImSchV)****for substances contained in the product:**

This product is not assigned to a hazard category.

**Water hazard class****WGK:**

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****16.1. Indication of changes**

2.1.	Classification of the substance or mixture
2.2.	Label elements
9.1.	Information on basic physical and chemical properties
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008

**16.2. Abbreviations and acronyms**

No data available

**16.3. Key literature references and sources for data**

No data available

**16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]**

Hazard classes and hazard categories	Hazard statements	Classification procedure
Skin corrosion/irritation ( <i>Skin Irrit. 2</i> )	H315: Causes skin irritation.	
Serious eye damage/eye irritation ( <i>Eye Irrit. 2</i> )	H319: Causes serious eye irritation.	

**Entkalker B15-30**

Revision date: 10 Aug 2023 Version: 3.4 Print date: 10 Aug 2023

Hazard classes and hazard categories	Hazard statements	Classification procedure
STOT-single exposure ( <i>STOT SE 3</i> )	H335: May cause respiratory irritation.	

**16.5. Relevant R-, H- and EUH-phrases (Number and full text)**

Hazard statements	
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

**16.6. Training advice**

No data available

**16.7. Additional information**

No data available

\* Data changed compared with the previous version.