according to Regulation 29 CFR 1910.1200

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name/designation:

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

Use of the substance/mixture:

Washing and cleaning products

Relevant identified uses:

Life cycle stage [LCS]

PW: Widespread use by professional workers

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor): etol Eberhard Tripp GmbH

Labor

Allerheiligenstr. 12 77728 Oppenau Germany

Telephone: +49(0)7804/41-0 **Telefax:** +49(0)7804/41-168

E-mail: info@etol.de
Website: www.etol.de

E-mail (competent person): wolfgang.gauss@etol.de

1.4. Emergency telephone number

Wolfgang Gauss, +49(0)7804/41-167 (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation 29 CFR 1910.1200-:

Hazard classes and hazard categories		Classification pro- cedure
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	

2.2. Label elements

Labelling according to Regulation 29 CFR 1910.1200

Hazard pictograms:



GHS07

Exclamation mark

Signal word: Warning

hazard statements for health hazards	
H319	Causes serious eye irritation.

Supplemental hazard information: -

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Precautionary statements Prevention	
P280	Wear eye/face protection.

Precautionary statements Response		
P305 + P351 + 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 data available

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation 29 CFR 1910.1200	Concen- tration
CAS No.: 77-92-9 EC No.: 201-069-1 REACH No.: 01-2119457026-42	citric acid Eye Irrit. 2 (H319) • Warning	25 – 50 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, 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.

In case of skin contact:

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

After eye contact:

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

Following ingestion:

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

Self-protection of the first aider:

Use personal protection equipment.

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

Serious eye damage/eye irritation

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

Extinguishing powder

Carbon dioxide (CO2)

according to Regulation 29 CFR 1910.1200

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5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

Hazardous combustion products:

Carbon monoxide Carbon dioxide (CO2)

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

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:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

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).

Fire prevent measures:

No special measures are necessary.

Advices on general occupational hygiene

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

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

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

Storage class (TRGS 510, Germany): 12 - non-combustible liquids that cannot be assigned to any of the above storage classes

7.3. Specific end use(s)

No data available

according to Regulation 29 CFR 1910.1200

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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	 Long-term occupational exposure limit value short-term occupational exposure limit value Instantaneous value Monitoring and observation processes Remark
TRGS 900 (DE)	citric acid CAS No.: 77-92-9 EC No.: 201-069-1	① 2 mg/m³ ② 4 mg/m³ ⑤ (einatembare Fraktion)

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	PNEC Value	① PNEC type
citric acid CAS No.: 77-92-9 EC No.: 201-069-1	0.44 mg/l	① PNEC aquatic, freshwater
citric acid CAS No.: 77-92-9 EC No.: 201-069-1	0.044 mg/l	① PNEC aquatic, marine water
citric acid CAS No.: 77-92-9 EC No.: 201-069-1	1,000 mg/l	① PNEC sewage treatment plant
citric acid CAS No.: 77-92-9 EC No.: 201-069-1	3.46 mg/kg	① PNEC sediment, freshwater
citric acid CAS No.: 77-92-9 EC No.: 201-069-1	34.6 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

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: Liquid Colour: colourless

Odour: odourless

according to Regulation 29 CFR 1910.1200

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Safety relevant basis data

parameter		at °C	Method	Remark
рН	1.1	20 °C		acidic
Melting point	not determined			
Freezing point	not determined			
Initial boiling point and boiling range	> 90 °C			
Decomposition temperature	not determined			
Flash point	not applicable			
Evaporation rate	not determined			
Auto-ignition temperature	not determined			
Upper/lower flammability or explosive limits	not determined			
Vapour pressure	not determined			
Vapour density	not determined			
Density	≈ 1 g/ml	20 °C		
Relative density	not determined			
Bulk density	not determined			
Water solubility	completely miscible	20 °C		
Partition coefficient: n-octanol/ water	not determined			
Dynamic viscosity	not determined			
Kinematic viscosity	not determined	40 °C		

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

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

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.

SECTION 11: Toxicological information

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

Substance name	Toxicological information
CAS No.: 77-92-9 FC No.: 201-069-1	LD ₅₀ oral: =5,400 mg/kg (Mouse) LD ₅₀ dermal: >2,000 mg/kg (Rat)

Acute oral toxicity:

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

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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:

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

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:

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.

Additional information:

No data available

11.2. Information on other hazards

No data available

SECTION 12: Ecological information

12.1. Toxicity

Substance name	Toxicological information
citric acid CAS No.: 77-92-9 EC No.: 201-069-1	LC ₅₀ : =440 mg/l 2 d (fish-, Leuciscus idus (golden orfe))

12.2. Persistence and degradability

Substance name	Biodegradation	Remark
citric acid CAS No.: 77-92-9 EC No.: 201-069-1	Yes, rapidly	

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

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

according to Regulation 29 CFR 1910.1200

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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:

20 01 29 * Detergents containing hazardous substances

*: Evidence for disposal must be provided.

Waste code packaging:

15 01 10 * packaging containing residues of or contaminated by dangerous substances

*: Evidence for disposal must be provided.

Waste treatment options

Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:

Non-contaminated packages may be recycled.

SECTION 14: Transport information

No dangerous good in sense of these transport regulations.

Land transport (ADR/ RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO- TI / IATA-DGR)
14.1. UN number o	· ID number		_
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.
14.2. UN proper shi	pping name		
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.
14.3. Transport haz	ard class(es)		
not relevant	_		
14.4. Packing group)		
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.
14.5. Environmenta	l hazards		
not relevant			
14.6. Special preca	utions for user		
not relevant	-		_

14.7. Maritime transport in bulk according to IMO instruments

not relevant

according to Regulation 29 CFR 1910.1200

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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 .-:

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.

Regulation (EC) No. 648/2004 (Detergents regulation):

<5% non-ionic surfactants

15.1.2. National regulations



[DE] National regulations

Störfallverordnung

for substances contained in the product:

This product is not assigned to a hazard category.

Water hazard class

WGK:

1 - schwach wassergefährdend

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

No data available

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 29 CFR 1910.1200

Classification according to Regulation 29 CFR 1910.1200-:

Hazard classes and hazard categories	Hazard statements	Classification pro- cedure
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	

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

Hazard statements	•
H319	Causes serious eye irritation.

16.6. Training advice

No data available

16.7. Additional information

No data available