

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

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Doyen SK 22 E

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

* 1.1. Product identifier

Trade name/designation:

Doyen SK 22 E

Additional information:

Restricted to professional users.

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):

etol Eberhard Tripp GmbH

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

1.4. Emergency telephone number

Vergiftungs-Informations-Zentrale Freiburg, 24h: +49(0)76119240

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
Serious eye damage/eye irritation (Eye Dam. 1)	H318: Causes serious eye damage.	

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



GHS05
Corrosion

Signal word: Danger

Hazard components for labelling:

C4-C6 dicarboxylic acids; fatty alcohol alkoxyate 4

hazard statements for health hazards	
H318	Causes serious eye damage.

Supplemental Hazard information (EU): -

Precautionary statements Prevention	
P280	Wear eye protection/face protection.

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Precautionary statements Response

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/....

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
	fatty alcohol alkoxyolate 4 Acute Tox. 4, Aquatic Chronic 3, Eye Irrit. 2 Warning H302-H319-H412	5 - 15 Wt %
CAS No.: 5949-29-1 EC No.: 201-069-1 REACH No.: 01-2119457026-42	citric acid monohydrate Eye Irrit. 2 Warning H319	1 - ≤ 5 Wt %
CAS No.: 68603-87-2 REACH No.: 01-2119458864-25	C4-C6 dicarboxylic acids Eye Dam. 1 Danger H318	1 - ≤ 5 Wt %
CAS No.: 28348-53-0 EC No.: 290-913-5 REACH No.: 01-2119489411-37	sodium p-cumenesulphonate Eye Irrit. 2 Warning H319	1 - ≤ 5 Wt %

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 place in recovery position and seek medical advice. Do not leave affected person unattended. Warning First aider: Pay attention to self-protection!

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:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After 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.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

- Water
- Carbon dioxide (CO₂)
- Extinguishing powder
- Co-ordinate fire-fighting measures to the fire surroundings.

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 (e.g. 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).

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/Store only in original container.

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Storage class: 12 - non-combustible liquids that cannot be assigned to any of the above storage classes

Further information on storage conditions:

Please note the expiry date

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

No data available

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	34 mg/m ³	① DNEL worker ② DNEL acute inhalative (systemic)
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	5 mg/m ³	① DNEL worker ② DNEL acute inhalative (local)
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	34 mg/m ³	① DNEL worker ② DNEL long-term inhalative (systemic)
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	5 mg/m ³	① DNEL worker ② DNEL long-term inhalative (local)
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	5 mg/kg	① DNEL worker ② DNEL acute dermal, short-term (systemic)
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	5 mg/kg	① DNEL worker ② DNEL long-term dermal (systemic)
sodium p-cumenesulphonate CAS No.: 28348-53-0	53.6 mg/m ³	① DNEL worker ② DNEL long-term inhalative (systemic)
sodium p-cumenesulphonate CAS No.: 28348-53-0	7.6 mg/kg bw/day	① DNEL worker ② DNEL long-term dermal (systemic)
sodium p-cumenesulphonate CAS No.: 28348-53-0	0.096 mg/ cm ²	① DNEL worker ② DNEL long-term dermal (local)

Substance name	PNEC Value	① PNEC type
citric acid monohydrate CAS No.: 5949-29-1	0.44 mg/l	① PNEC aquatic, freshwater
citric acid monohydrate CAS No.: 5949-29-1	0.044 mg/l	① PNEC aquatic, marine water
citric acid monohydrate CAS No.: 5949-29-1	3.46 mg/kg	① PNEC sediment, freshwater
citric acid monohydrate CAS No.: 5949-29-1	34.6 mg/kg	① PNEC sediment, marine water
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	0.126 mg/l	① PNEC aquatic, freshwater
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	57.5 mg/l	① PNEC sewage treatment plant (STP)
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	0.484 mg/kg	① PNEC sediment, freshwater
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	0.0484 mg/ kg	① PNEC sediment, marine water

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Substance name	PNEC Value	① PNEC type
sodium p-cumenesulphonate CAS No.: 28348-53-0	0.23 mg/l	① PNEC aquatic, freshwater
sodium p-cumenesulphonate CAS No.: 28348-53-0	100 mg/l	① PNEC sewage treatment plant (STP)
sodium p-cumenesulphonate CAS No.: 28348-53-0	0.023 mg/l	① PNEC aquatic, marine water
sodium p-cumenesulphonate CAS No.: 28348-53-0	0.862 mg/kg	① PNEC sediment, freshwater
sodium p-cumenesulphonate CAS No.: 28348-53-0	0.0862 mg/kg	① PNEC soil, 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 DIN EN 166

8.2.3. Environmental exposure controls

No data available

8.3. Additional information

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

Safety relevant basis data

parameter		at °C	Method	Remark
pH	2.5	20 °C		
Melting point	<i>not determined</i>			
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	> 90 °C			
Decomposition temperature (°C):	<i>not determined</i>			
Flash point	<i>not applicable</i>			
Evaporation rate	<i>not determined</i>			
Ignition temperature in °C	<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>			
Relative density	≈ 1.08 g/ml	20 °C		
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		

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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 special measures are necessary.

10.5. Incompatible materials

Alkali (lye)

10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours. In case of fire: Gases/vapours, toxic

SECTION 11: Toxicological information

11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
	fatty alcohol alkoxyolate 4	LD ₅₀ oral: >300 - <2,000 mg/kg (Rat)
28348-53-0	sodium p-cumenesulphonate	LD ₅₀ oral: >7,000 mg/kg (Rat) LD ₅₀ dermal: >2,000 mg/kg (Rabbit) LC ₅₀ inhalative: =6.41 mg/l (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:

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

Serious eye damage/irritation:

Causes serious eye damage.

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

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SECTION 12: Ecological information

12.1. Toxicity

CAS No.	Substance name	Toxicological information
	fatty alcohol alkoxylate 4	LC₅₀ : >1 - <10 mg/l 2 d (Leuciscus idus (golden orfe)) NOEC : >0.1 - <1 mg/l 21 d
5949-29-1	citric acid monohydrate	LC₅₀ : =440 mg/l 2 d (Leuciscus idus (golden orfe))
68603-87-2	C4-C6 dicarboxylic acids	LC₅₀ : >147 - <215 mg/l 4 d (Leuciscus idus (golden orfe)) EC₅₀ : =88.4 mg/l 2 d (Daphnia magna (Big water flea)) EC₅₀ : =41.9 mg/l 3 d (Scenedesmus subspicatus)
28348-53-0	sodium p-cumenesulphonate	LC₅₀ : >1,000 mg/l 4 d (Oncorhynchus mykiss (Rainbow trout)) EC₅₀ : >1,000 mg/l 2 d (Daphnia magna (Big water flea)) ErC₅₀ : >230 mg/l 4 d

12.2. Persistence and degradability

CAS No.	Substance name	Biodegradation	Remark
	fatty alcohol alkoxylate 4	Yes, rapidly	
5949-29-1	citric acid monohydrate	Yes, rapidly	
68603-87-2	C4-C6 dicarboxylic acids	Yes, rapidly	
28348-53-0	sodium p-cumenesulphonate	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. 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:

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

Waste treatment options

Appropriate disposal / Product:

Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:

Completely emptied packages can be recycled.

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13.2. Additional information

No data available

SECTION 14: Transport information

No dangerous good in sense of these transport regulations.

14.1. UN-No.

not relevant

14.2. UN proper shipping name

not relevant

14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

not relevant

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not relevant

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):

Volatile organic compounds (VOC) content in percent by weight: 0%

15.1.2. National regulations

No data available

15.2. Chemical Safety Assessment

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

15.3. Additional information

No data available

SECTION 16: Other information

16.1. Indication of changes

1.1.	Product identifier
1.3.	Details of the supplier of the safety data sheet

16.2. Abbreviations and acronyms

No data available

16.3. Key literature references and sources for data

No data available

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

Classification according to Regulation (EC) No 1272/2008 [CLP]-:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Serious eye damage/eye irritation (Eye Dam. 1)	H318: Causes serious eye damage.	

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

Hazard statements	
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

16.6. Training advice

No data available

16.7. Additional information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

* Data changed compared with the previous version