Doyen SK 10

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

1.1. Product identifier

Trade name/designation:

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UFI:
PFDX-D3N4-S65E-U3NM

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

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 Irrit. 2)*	H319: Causes serious eye irritation.	Calculation method.

2.2. Label elements

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

Hazard pictograms:

GHS07
Exclamation mark

Signal word: Warning

Hazard statements for health hazards	
H319	Causes serious eye irritation.

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Supplemental hazard information: none

Precautionary statements Prevention	
P280	Wear eye/face protection.

Precautionary statements Response	
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.: 15763-76-5 EC No.: 239-854-6 REACH No.: 01-2119489411-37	**sodium p-cumenesulphonate** Eye Irrit. 2 (H319) Warning	1 – 5 weight-%
CAS No.: 111905-53-4	**Alcohols, C13-15 branched and linear, butoxylated, ethoxylated** Acute Tox. 4 (H302), Aquatic Chronic 3 (H412), Eye Irrit. 2 (H319) Warning	1 – 5 weight-%
CAS No.: 5949-29-1 EC No.: 201-069-1 REACH No.: 01-2119457026-42	**citric acid monohydrate** Eye Irrit. 2 (H319) Warning	1 – 5 weight-%
CAS No.: 68603-87-2 REACH No.: 01-2119458864-25	**C4-C6 dicarboxylic acids** Eye Dam. 1 (H318) Danger	1 – 5 weight-%
CAS No.: 3811-73-2 EC No.: 223-296-5 REACH No.: 01-2119493385-28	**pyridine-2-thiol 1-oxide, sodium salt** Acute Tox. 3 (H311, H331), Acute Tox. 4 (H302), Aquatic Acute 1 (H400), Aquatic Chronic 2 (H411), Eye Irrit. 2 (H319), STOT RE 1 (H372), Skin Irrit. 2 (H315), Skin Sens. 1 (H317) Danger M-factor (acute): 100	0 – < 0.02 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. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

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.

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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)

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

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	**citric acid monohydrate** CAS No.: 5949-29-1 EC No.: 201-069-1	① 2 mg/m³ ② 4 mg/m³ ⑤ (einatembare Fraktion) DFG, Y
TRGS 900 (DE) from 29 Mar 2019	**pyridine-2-thiol 1-oxide, sodium salt** CAS No.: 3811-73-2 EC No.: 223-296-5	① 0.2 mg/m³ ② 0.4 mg/m³ ⑤ (einatembare Fraktion; kann über die Haut aufgenommen werden) DFG, H, Y

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
sodium p-cumenesulphonate CAS No.: 15763-76-5 EC No.: 239-854-6	26.9 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
sodium p-cumenesulphonate CAS No.: 15763-76-5 EC No.: 239-854-6	136.25 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
sodium p-cumenesulphonate CAS No.: 15763-76-5 EC No.: 239-854-6	0.096 mg/cm²	① DNEL worker ② Long-term - dermal, local effects
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	34 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	34 mg/m³	① DNEL worker ② Acute - inhalation, systemic effects
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	5 mg/m³	① DNEL worker ② Long-term – inhalation, local effects
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	5 mg/m³	① DNEL worker ② Acute - inhalation, local effects
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	5 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects

Substance name	DNEL value	① DNEL type ② Exposure route
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	5 mg/kg	① DNEL worker ② Acute – dermal, systemic effects

Substance name	PNEC Value	① PNEC type
sodium p-cumenesulphonate CAS No.: 15763-76-5 EC No.: 239-854-6	0.23 mg/L	① PNEC aquatic, freshwater
sodium p-cumenesulphonate CAS No.: 15763-76-5 EC No.: 239-854-6	0.023 mg/L	① PNEC aquatic, marine water
sodium p-cumenesulphonate CAS No.: 15763-76-5 EC No.: 239-854-6	0.862 mg/kg	① PNEC sediment, freshwater
sodium p-cumenesulphonate CAS No.: 15763-76-5 EC No.: 239-854-6	0.037 mg/kg	① PNEC soil
sodium p-cumenesulphonate CAS No.: 15763-76-5 EC No.: 239-854-6	0.0862 mg/kg	① PNEC soil, marine water
citric acid monohydrate CAS No.: 5949-29-1 EC No.: 201-069-1	0.44 mg/L	① PNEC aquatic, freshwater
citric acid monohydrate CAS No.: 5949-29-1 EC No.: 201-069-1	0.044 mg/L	① PNEC aquatic, marine water
citric acid monohydrate CAS No.: 5949-29-1 EC No.: 201-069-1	1,000 mg/L	① PNEC sewage treatment plant
citric acid monohydrate CAS No.: 5949-29-1 EC No.: 201-069-1	3.46 mg/kg	① PNEC sediment, freshwater
citric acid monohydrate CAS No.: 5949-29-1 EC No.: 201-069-1	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	0.0126 mg/L	① PNEC aquatic, marine water
C4-C6 dicarboxylic acids CAS No.: 68603-87-2	57.5 mg/L	① PNEC sewage treatment plant
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

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

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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

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	2.7	20 °C	
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	≈ 1.04 g/cm³	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	

particle characteristics:
not applicable

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), concentrated

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

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SECTION 11: Toxicological information

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

sodium p-cumenesulphonate CAS No.: 15763-76-5 EC No.: 239-854-6
LD_{50} oral: >7,000 mg/kg (Rat)
LD_{50} dermal: >2,000 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (vapour): =6.41 mg/L (Rat)
Alcohols, C13-15 branched and linear, butoxylated, ethoxylated CAS No.: 111905-53-4
LD_{50} oral: >300 – <2,000 mg/kg (Rat)
citric acid monohydrate CAS No.: 5949-29-1 EC No.: 201-069-1
LD_{50} oral: =5,400 mg/kg (Mouse)
LD_{50} dermal: >2,000 mg/kg (Rat)
C4-C6 dicarboxylic acids CAS No.: 68603-87-2
LD_{50} oral: =6,000 mg/kg (Rat) OECD 401
LD_{50} dermal: =7,940 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (dust/mist): =7.7 mg/L 4 h (Rat) OECD 403
pyridine-2-thiol 1-oxide, sodium salt CAS No.: 3811-73-2 EC No.: 223-296-5
LD_{50} oral: ≈1,208 mg/kg

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 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

sodium p-cumenesulphonate CAS No.: 15763-76-5 EC No.: 239-854-6
LC_{50}: >1,000 mg/L 4 d (fish-----, Oncorhynchus mykiss (Rainbow trout))
EC_{50}: >1,000 mg/L 2 d (crustaceans, Daphnia magna (Big water flea))
ErC_{50}: >230 mg/L 4 d (Algae/water plant)
Alcohols, C13-15 branched and linear, butoxylated, ethoxylated CAS No.: 111905-53-4
LC_{50}: >1 – <10 mg/L 2 d (fish-----, Leuciscus idus (golden orfe))
NOEC: >0.1 – <1 mg/L 21 d
citric acid monohydrate CAS No.: 5949-29-1 EC No.: 201-069-1
LC_{50}: =440 mg/L 2 d (fish-----, Leuciscus idus (golden orfe))
C4-C6 dicarboxylic acids CAS No.: 68603-87-2
LC_{50}: >147 – <215 mg/L 4 d (fish-----, Leuciscus idus (golden orfe))
EC_{50}: =88.4 mg/L 2 d (crustaceans, Daphnia magna (Big water flea))
EC_{50}: =41.9 mg/L 3 d (Algae/water plant, Scenedesmus subspicatus)
pyridine-2-thiol 1-oxide, sodium salt CAS No.: 3811-73-2 EC No.: 223-296-5
EC_{50}: =0.46 mg/L 3 d (Algae/water plant, Selenastrum capricornutum)
EC_{50}: =0.022 mg/L 2 d (crustaceans)
LC_{50}: =0.00767 mg/L 4 d (fish-----, Danio rerio (zebrafish-----))
NOEC: =0.08 mg/L 3 d (Algae/water plant, Selenastrum capricornutum)

12.2. Persistence and degradability

sodium p-cumenesulphonate CAS No.: 15763-76-5 EC No.: 239-854-6
Biodegradation: Yes, rapidly
Alcohols, C13-15 branched and linear, butoxylated, ethoxylated CAS No.: 111905-53-4
Biodegradation: Yes, rapidly
citric acid monohydrate CAS No.: 5949-29-1 EC No.: 201-069-1
Biodegradation: Yes, rapidly
C4-C6 dicarboxylic acids CAS No.: 68603-87-2
Biodegradation: 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

sodium p-cumenesulphonate CAS No.: 15763-76-5 EC No.: 239-854-6
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
C4-C6 dicarboxylic acids CAS No.: 68603-87-2
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
pyridine-2-thiol 1-oxide, sodium salt CAS No.: 3811-73-2 EC No.: 223-296-5
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

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 02	Plastic 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)
14.1. UN number or 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 shipping 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 hazard class(es)			
not relevant	not relevant	not relevant	not relevant
14.4. Packing group			
not relevant	not relevant	not relevant	not relevant
14.5. Environmental hazards			
not relevant	not relevant	not relevant	not relevant
14.6. Special precautions for user			
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%
Regulation (EC) No. 648/2004 [Detergents regulation]
<5% non-ionic surfactants , polycarboxylates , Preservative : benzisothiazolinone, sodium pyrithione

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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:

2 - obviously 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

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 (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	Calculation method.

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

Hazard statements	
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

16.6. Training advice

No data available

16.7. Additional information

No data available