

SAFETY DATA SHEET

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

Revision date: 5 Dec 2022

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Version: 12.1



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Doyen RS 120

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

1.1. Product identifier

Trade name/designation:

Doyen RS 120

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

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
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.	

2.2. Label elements

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

Hazard pictograms:



GHS07

Exclamation mark

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Signal word: Warning

Hazard statements for health hazards

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Supplemental hazard information

EUH208 Contains Acetic acid, chloro-, reaction products with 2-heptyl-4,5-dihydro-1H-imidazole-1-ethanol and sodium hydroxide, Acetic acid, 2-chloro-, reaction products with 4,5-dihydro-2-nonyl-1H-imidazole-1-ethanol and sodium hydroxide. May produce an allergic reaction.

Precautionary statements Prevention

P280 Wear protective gloves and 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.: 7664-38-2 EC No.: 231-633-2 Index No.: 015-011-00-6 REACH No.: 01-2119485924-24	orthophosphoric acid Skin Corr. 1B (H314) Danger Specific concentration limit (SCL) Skin Corr. 1B; H314: C ≥ 25% Skin Irrit. 2; H315: 10% ≤ C < 25% Eye Dam. 1; H318: C ≥ 25% Eye Irrit. 2; H319: 10% ≤ C < 25%	10 - 25 weight-%
	fatty alcohol alkoxyate Acute Tox. 4 (H302), Aquatic Chronic 3 (H412), Eye Irrit. 2 (H319) Warning	1 - ≤ 5 weight-%
CAS No.: 68608-64-0	Acetic acid, chloro-, reaction products with 2-heptyl-4,5-dihydro-1H-imidazole-1-ethanol and sodium hydroxide Eye Irrit. 2 (H319), Skin Irrit. 2 (H315), Skin Sens. 1 (H317) Warning	0 - < 0.2 weight-%
CAS No.: 68608-61-7	Acetic acid, 2-chloro-, reaction products with 4,5-dihydro-2-nonyl-1H-imidazole-1-ethanol and sodium hydroxide Eye Irrit. 2 (H319), Skin Irrit. 2 (H315), Skin Sens. 1 (H317) Warning	0 - < 0.2 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.

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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.

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

Skin corrosion/irritation 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)

Unsuitable extinguishing media:

Strong water jet

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

Hazardous combustion products:

Carbon monoxide
Carbon dioxide (CO₂)
Phosphorus oxides

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

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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:

Please note the expiry date

storage temperature : 5-35°C 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): 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)	orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2	① 2 mg/m ³ ② 4 mg/m ³ ⑤ (einatembare Fraktion) DFG, EU, AGS, Y
IOELV (EU)	orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2	① 1 mg/m ³ ② 2 mg/m ³

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
orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2	10.7 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2	1 mg/m ³	① DNEL worker ② Long-term - inhalation, local effects

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Substance name	DNEL value	① DNEL type ② Exposure route
orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2	2 mg/m ³	① DNEL worker ② Acute - inhalation, local effects

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) >0,2mm
Breakthrough time: 480 min In the case of wanting to use the gloves again, clean them before taking off and air them well. Breakthrough times and swelling properties of the material must be taken into consideration.

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	2.3	20 °C	② 2 g/l
Melting point	not determined		
Freezing point	not determined		
Initial boiling point and boiling range	> 90 - 20 °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	≈ 1.1 g/cm ³	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	

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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 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

fatty alcohol alkoxyate
LD₅₀ oral: >300 - ≤2,000 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:

Contains Acetic acid, chloro-, reaction products with 2-heptyl-4,5-dihydro-1H-imidazole-1-ethanol and sodium hydroxide, Acetic acid, 2-chloro-, reaction products with 4,5-dihydro-2-nonyl-1H-imidazole-1-ethanol and sodium hydroxide. May produce an allergic reaction.

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

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SECTION 12: Ecological information

12.1. Toxicity

orthophosphoric acid CAS No.: 7664-38-2 EC No.: 231-633-2

LC₅₀: >3 - <3.25 mg/L 4 d (fish-----, Lepomis macrochirus (Bluegill))

EC₅₀: >100 mg/L 2 d (crustaceans, Daphnia magna (Big water flea))

NOEC: =100 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus)

fatty alcohol alkoxylate

LC₅₀: >1 - ≤10 mg/L 4 d (fish-----, Leuciscus idus (golden orfe))

EC₅₀: >1 - ≤10 mg/L 2 d (crustaceans, Daphnia magna (Big water flea))

NOEC: >0.1 - ≤1 mg/L 21 d (crustaceans, Daphnia magna (Big water flea))

12.2. Persistence and degradability

fatty alcohol alkoxylate

Biodegradation: Yes, rapidly

Acetic acid, chloro-, reaction products with 2-heptyl-4,5-dihydro-1H-imidazole-1-ethanol and sodium hydroxide CAS No.: 68608-64-0

Biodegradation: Yes, rapidly

Acetic acid, 2-chloro-, reaction products with 4,5-dihydro-2-nonyl-1H-imidazole-1-ethanol and sodium hydroxide CAS No.: 68608-61-7

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

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

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:

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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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			
UN 1805	UN 1805	UN 1805	UN 1805
14.2. UN proper shipping name			
PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID, SOLUTION
14.3. Transport hazard class(es)			
 8	 8	 8	 8
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
No	No	No	No
14.6. Special precautions for user			
Limited quantity (LQ): 5L Excepted Quantities (EQ): E1 Hazard identification number (Kemler No.): 80 Classification code-----: C1 Tunnel restriction code-----: (E)	Limited quantity (LQ): 5L Excepted Quantities (EQ): E1 Classification code-----: C1	Limited quantity (LQ): 5L Excepted Quantities (EQ): E1 EmS-No.: F-A, S-B	No data available

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]

15-30% phosphates (Phosphoric acid, Solution)

<5% non-ionic surfactants, amphoteric surfactants

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 - deutlich wassergefährdend

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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

3.2.	Mixtures
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture

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.	

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

Hazard statements	
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
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.