

According to Regulation (EC) No 1907/2006

ZERO TEN S

Version number: 3
Issued: 2025-09-02
Replaces SDS: 2022-12-21



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

1.1. Product identifier

Trade name

ZERO TEN S

UFI code

4PUJ-D8A0-MN1Q-4F1G

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

Relevant identified uses

Acidic basic cleaner for professional users.

Not suitable for use in

All other uses are discouraged.

1.3. Details of the supplier of the safety data sheet

Supplier

KLEEN PURGATIS GmbH

Address

Dieselstraße 10
32120 Hiddenhausen
Germany

Telephone

+49 (0) 5223 9970-40

Email

info@kleen-purgatis.de

Web site

www.kleenpurgatis.de

Contact person

Regulatory Affairs

Email

info@kleen-purgatis.de

1.4. Emergency telephone number

+49 (0)551 - 19240 (GIZ-Nord)

Available outside office hours

Yes

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Classification

Skin irritation, hazard category 2

Eye irritation, hazard category 2

Hazard statements

H315, H319

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Warning

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P264 Wash hands thoroughly after handling.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

This mixture does not contain any substances that are classified as PBT or vPvB according to Article 57 / Annex XIII of the REACH regulation.

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SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-pharse M factor acute M factor chronic	Specific concentration limits ATE	Note
phosphoric acid 75%	7664-38-2 231-633-2 01-2119485924-24-xxxx 015-011-00-6	10 - 20%	Met. Corr. 1, Acute Tox. 4 - oral, Skin Corr. 1B, Eye Dam. 1	H290, H302, H314, H318 - -	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% ATE [Oral]: 500 mg/kg bw	B
3-butoxypropan-2-ol	5131-66-8 225-878-4 01-2119475527-28-xxxx 603-052-00-8	1 - 5%	Skin Irrit. 2, Eye Irrit. 2	H315, H319 - -		-

Substance additional information

For the complete text of H- / EUH-statements mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Description of first aid measures

First responders: Pay attention to self-protection.

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a physician if necessary.

Skin contact

If skin irritation occurs: Get medical advice/attention. In case of contact, immediately flush skin with plenty of water.

Eye contact

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Ingestion

Do NOT induce vomiting. Drink water. Call a POISON CENTER/doctor.

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Information for doctors

Show this safety data sheet to the doctor in attendance.

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

Inhalation

Inhalation of vapours is irritating to the respiratory system, may cause throat pain and cough.

Skin contact

Causes skin irritation.

Eye contact

Eye irritation, cloudy / blurred field of vision, excessive lachrymation.

Ingestion

Nausea, vomiting, gastrointestinal discomfort.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray, dry powder, foam, carbon dioxide (CO₂). The product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self contained breathing apparatus.

Measures in case of fire

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. Ensure adequate ventilation, especially in confined areas. Avoid direct contact with the material / product.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

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6.3. Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections

For information on storage and handling see section 7.
For information on exposure and personal protective equipment, see Section 8.
For information on incompatible materials, see Section 10.
For information on disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

Wear personal protective equipment. Avoid direct contact with the material / product.

General hygiene

When using, do not eat, drink or smoke.
Wash hands before breaks and immediately after handling the product.
The usual precautionary measures when handling chemicals must be observed.

7.2. Conditions for safe storage, including any incompatibilities

Store in original container. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from food, drink and animal feeding stuffs. Store in a place accessible by authorized persons only.

Storage class according to TRGS 510: 12 (non-flammable liquids)

Storage temperature: 10 °C to 40 °C

7.3. Specific end use(s)

GISCODE: GG50
See section 1.2: Acidic basic cleaner

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure limits

Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m ³	Short-term exposure limit ppm / mg/m ³	Source	Remark	Year
phosphoric acid (EU)	7664-38-2 231-633-2	- / 1 /	- / 2 /			-

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DNEL/DMEL

Product/Substance name (CAS No./EC No.)	Type	Exposure	Value	Population	Effects
phosphoric acid (7664-38-2/231-633-2)	DNEL	Chronic (long term) Inhalation	10.7 mg/m ³	Workers	Systemic
phosphoric acid (7664-38-2/231-633-2)	DNEL	Chronic (long term) Inhalation	1 mg/m ³	Workers	Local
phosphoric acid (7664-38-2/231-633-2)	DNEL	Acute (short term) Inhalation	2 mg/m ³	Workers	Local
phosphoric acid (7664-38-2/231-633-2)	DNEL	Chronic (long term) Oral	100 µg/kg bw/day	Consumers	Systemic
3-butoxypropan-2-ol (5131-66-8/225-878-4)	DNEL	Chronic (long term) Inhalation	147 mg/m ³	Workers	Systemic
3-butoxypropan-2-ol (5131-66-8/225-878-4)	DNEL	Chronic (long term) Dermal	52 mg/kg bw/day	Workers	Systemic
3-butoxypropan-2-ol (5131-66-8/225-878-4)	DNEL	Chronic (long term) Oral	12.5 mg/kg bw/day	Consumers	Systemic

PNEC/PEC

Product/Substance name (CAS No./EC No.)	Type	Environmental compartment	Value
3-butoxypropan-2-ol (5131-66-8/225-878-4)	PNEC	Freshwater	525 µg/l
3-butoxypropan-2-ol (5131-66-8/225-878-4)	PNEC	Sewage Treatment Plant	10 mg/l
3-butoxypropan-2-ol (5131-66-8/225-878-4)	PNEC	Sediment (freshwater)	2.36 mg/kg sediment dw
3-butoxypropan-2-ol (5131-66-8/225-878-4)	PNEC	Soil	0.16 mg/kg soil dry weight

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Eye / face protection

Chemical-resistant safety glasses with side protection conforming to EN166.

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Hand protection

Protective gloves complying with EN 374.

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Other skin protection

This type of personal protective equipment is not necessary under normal and foreseeable use of the product.

Respiratory protection

This type of personal protective equipment is not necessary under normal and foreseeable use of the product.

Thermal hazards

Not applicable

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Colourless

Odour

Characteristic

Odour threshold

Not determined for the mixture.

Melting point / freezing point

Not determined for the mixture.

Boiling point or initial boiling point and boiling range

Not determined for the mixture.

Flammability

Not applicable.

Lower and upper explosion limit

The product / mixture has no explosive properties.

Flash point

No data available

Auto-ignition temperature

Not applicable.

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Decomposition temperature

Not determined for the mixture.

pH

1

Kinematic viscosity

Not determined for the mixture.

Viscosity, dynamic

Not determined for the mixture.

Solubility

Water soluble

Water solubility

Miscibility

Partition coefficient n-octanol/water

Not determined for the mixture.

Vapour pressure

Not determined for the mixture.

Density and/or relative density

1.088 g/cm³

Relative vapour density

Not determined for the mixture.

Evaporation Rate

Not determined for the mixture.

Explosive properties

The product / mixture has no explosive properties.

Oxidising properties

The product / mixture has no oxidizing properties.

VOC (CH)%

< 3 %

Particle characteristics

This product / mixture does not contain any nanomaterials or nanoforms as defined in Regulation (EC) 1907/2006.

9.2. Other information

No data available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Stable at normal conditions

10.2. Chemical stability

The product is chemically stable.

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

Protect from frost, heat and sunlight.

10.5. Incompatible materials

Oxidizing agents, strong acids, strong bases.

10.6. Hazardous decomposition products

For information on combustion products, see Section 5.

Hazardous decomposition products formed under fire conditions.

SECTION 11: Toxicological information

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

Toxicology data for the components

Acute toxicity

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

Product / Sub- stance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Duration of exposure	Test animals	Method / Guideline
3-butoxypropan- 2-ol 5131-66-8 / 225-878-4	LD50	3.300 mg/kg	Oral	-	rat	-
3-butoxypropan- 2-ol 5131-66-8 / 225-878-4	LD50	>2.000 mg/kg	Skin contact	-	rat	-
phosphoric acid 75% 7664-38-2 / 231-633-2	LD50	> 300 - < 2.000 mg/kg	Oral	-	rat	OECD 423
phosphoric acid 75% 7664-38-2 / 231-633-2	LC50	850 mg/l	Inhalative	2h	rat	-

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Product / Sub- stance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Duration of exposure	Test animals	Method / Guideline
phosphoric acid 75% 7664-38-2 / 231-633-2	LD50	2740 mg/kg	Dermal	-	rabbit	-

Skin corrosion/irritation

Skin irritation, hazard category 2

Serious eye damage/irritation

Eye irritation, hazard category 2

Respiratory or skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

The mixture / product does not contain any ingredients with endocrine disrupting properties in terms of regulations (EC) 1907/2006 and (EU) 2018/605 and the delegated regulation (EU) 2017/2100.

SECTION 12: Ecological information

12.1. Toxicity

Acute fish toxicity

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Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
phosphoric acid 7664-38-2 / 231-633-2	LC50	98-106 mg/l	96h	Lepomis macrochirus
3-butoxypropan-2-ol 5131-66-8 / 225-878-4	LC50	560-1.000 mg/l	96h	Poecilia reticulata

Acute algae toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Endpoint of the test	Species
phosphoric acid 7664-38-2 / 231-633-2	EC50	>100 mg/l	72h	Growth rate	algae
3-butoxypropan-2-ol 5131-66-8 / 225-878-4	EC50	>1.000 mg/l	96h	-	Pseudokirchneriella subcapitata

Acute crustacean toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline
phosphoric acid 7664-38-2 / 231-633-2	EC50	>100 mg/l	48h	Daphnia magna (Water flea)	OECD 202
3-butoxypropan-2-ol 5131-66-8 / 225-878-4	EC50	>1.000 mg/l	48h	Daphnia magna	-

Micro-/macro organism toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline
phosphoric acid 7664-38-2 / 231-633-2	EC50	>100 mg/l	3h	Activated sludge	OECD 209
3-butoxypropan-2-ol 5131-66-8 / 225-878-4	EC50	>1.000 mg/l	3h	Bacteria (activated sludge)	-

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12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

Mobility

No information available

12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are classified as PBT or vPvB according to Article 57 / Annex XIII of the REACH regulation.

12.6. Endocrine disrupting properties

The mixture / product does not contain any ingredients with endocrine disrupting properties in terms of regulations (EC) 1907/2006 and (EU) 2018/605 and the delegated regulation (EU) 2017/2100.

12.7. Other adverse effects

This product / mixture does not contain any substances within the meaning of Regulation (EC) No. 1005/2009 that deplete the ozone layer.

Other

German Water Class

WGK1 - slightly water endangering

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

Dispose of as hazardous waste in compliance with local and national regulations.

Packaging

Do not re-use empty containers. Empty containers should be taken for local recycling, recovery or waste disposal. Contaminated packaging : Dispose of as unused product.

Waste code	Waste description
20 01 29*	detergents containing hazardous substances

Please note - an asterisk (*) next to a code denotes that it is HAZARDOUS WASTE.

SECTION 14: Transport information

14.1. UN number

No dangerous goods in the sense of the transport regulations

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14.2. UN proper shipping name

ADR / RID / ADN proper shipping name

Not classified as dangerous in the meaning of transport regulations.

14.3. Transport hazard class(es)

Label

Not classified as dangerous in the meaning of transport regulations.

14.4. Packing group

Not classified as dangerous in the meaning of transport regulations.

14.5. Environmental hazards

Environmental hazards

Not classified as dangerous in the meaning of transport regulations.

14.6. Special precautions for user

Special precautions for user

The usual precautionary measures when handling chemicals must be observed.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

Other

Not applicable

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SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 648/2004 (detergents)
 Ingredients according to Annex VII: < 5 % phosphonates

Regulation (EC) No. 1272/2008 (CLP)

Regulation (EC) No. 1907/2006 (REACH)
 Substances subject to authorization according to Annex XIV: not applicable
 Substance restrictions according to Annex XVII: not applicable
 Substances on the REACH candidate list (SVHC): not applicable

Regulation (EU) No. 528/2012 (BPR)
 Active ingredients: not applicable

Regulation (EU) 2019/1148 (explosives)
 Restricted raw material according to Annex I: not applicable
 Notifiable raw materials according to Annex II: not applicable

Directive 2011/65 / EU (ROHS 2)
 Substance restrictions according to Annex II: not applicable

Regulation (EU) 2019/1021 (POP)
 Persistent organic pollutants: not applicable

Directive 2012/18/EU (Seveso III)
 Seveso hazard category: not applicable

National regulations

In addition, comply with all national and local regulations for the handling of chemicals.

Other regulations, limitations and legal regulations

Take note of Dir 94/33/EC on the protection of young people at work.

15.2. Chemical safety assessment

The mixture has not been subjected to a safety assessment.

SECTION 16: Other information

Changes to previous revision

Anpassung im Kapitel 1.1 (UFI) und Kapitel 12 (WGK)

Abbreviations

ADN - European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
 ADR - The European Agreement concerning the International Carriage of Dangerous Goods by Road

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CAS - Chemical Abstract Service
 CLP - Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DMEL - Derived Minimum Effect Level
 DNEL - Derived No Effect Level
 EC50 - Half maximal effective concentration 50%
 GHS - Globally Harmonized System of Classification and Labelling of Chemicals
 IATA - International Air Transport Association
 IMDG - International Maritime Dangerous Goods
 LC50 - Lethal concentration 50%
 LD50 - Lethal dosis 50 %
 MARPOL - International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("Marpol" - marine pollution)
 PBT - Persistent, bioaccumulative and toxic substance
 PEC - Predicted Environmental Concentration
 PNEC - Predicted No Effect Concentration
 REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals
 RID - The regulations concerning the International Carriage of Dangerous Goods by Rail
 SVHC - Substance of Very High Concern
 vPvB - Very persistent, very bioaccumulative substance

References to key literature and data sources

REACH registration dossiers
 ECHA C&L - Inventory
 Safety data sheets from raw material suppliers

Evaluation methods for classification

Classification for mixtures and used evaluation method according to Article 9 of regulation (EC) 1272/2008 [CLP]:
 Health hazards: calculation method

Phrase meaning

Skin Irrit. 2 - Skin irritation, hazard category 2
 Eye Irrit. 2 - Eye irritation, hazard category 2
 Met. Corr. 1 - Corrosive to metals, hazard category 1
 Acute Tox. 4 - oral - Acute toxicity, oral, hazard category 4
 Skin Corr. 1B - Skin corrosion, hazard category 1B
 Eye Dam. 1 - Serious eye damage, hazard category 1
 H290 May be corrosive to metals.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.

Additional information

This safety data sheet is prepared in accordance with Commission Regulation (EU) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878.

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Manufacturer's notes

Legal disclaimer: The above information is believed to be correct. This company shall not be held liable for any damage resulting from handling or from contact with the above product.