

SECTION 1: Identification of the substance/mixture and of the company/undertaking**- 1.1 Product identifier****- Trade name** D 2100**- Article number:** 1000602422001**- 1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

- Application of the substance / the mixture Cleaning agent / Cleaner**- 1.3 Details of the supplier of the safety data sheet****- Manufacturer/Supplier:**

ph-cleantec GmbH

Gutenbergstr. 14

D-70736 Fellbach

Phone: + 49(0)711 5180 600

Fax: + 49(0)711 5180 0994

- Informing department:

+ 49(0)711 5180 600

E-mail: info@ph-cleantec.de

- 1.4 Emergency telephone number:

National Poisons Information Service (NPIS) - Emergency call (healthcare professionals): (+44) 844 892 0111 - 0344 892 0111

SECTION 2: Hazards identification**- 2.1 Classification of the substance or mixture****- Classification according to Regulation (EC) No 1272/2008**

Skin Irrit. 2 H315 Causes skin irritation.

Eye Dam. 1 H318 Causes serious eye damage.

- 2.2 Label elements**- Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

- Hazard pictograms

GHS05

- Signal word Danger**- Hazard-determining components of labelling:**

2-aminoethanol

fatty alcohol alkoxylate

Amines, coco alkyl, ethoxylated

- Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

- Precautionary statements

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water/-

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

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

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P362 Take off contaminated clothing.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:**

Mixture of the substances listed below with harmless additions (aqueous solution).
Mixture of the substances listed below with harmless additions

- **Dangerous components:**

Polymer	isononanoic acid and neutralisation products Acute Tox. 4, H302; Eye Irrit. 2, H319	≥2.5-<10%
CAS: 7320-34-5 EINECS: 230-785-7 Reg.nr.: 01-2119489369-18	tetrapotassium pyrophosphate Eye Irrit. 2, H319	≥2.5-<10%
CAS: 141-43-5 EINECS: 205-483-3 Reg.nr.: 01-2119486455-28	2-aminoethanol Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; STOT SE 3, H335; Aquatic Chronic 3, H412	≥1-<2.5%
Polymer Reg.nr.: 02-2119552440-48	fatty alcohol alkoxyate Eye Dam. 1, H318; Skin Irrit. 2, H315; Aquatic Chronic 3, H412	≥1-<2.5%
CAS: 61791-14-8 NLP: 500-152-2	Amines, coco alkyl, ethoxylated Eye Dam. 1, H318; Acute Tox. 4, H302	≥1-<2.5%
CAS: 146340-16-1 Polymer	fatty alcohol ethoxylate butyl ether Aquatic Acute 1, H400; Skin Irrit. 2, H315; Aquatic Chronic 3, H412	≥0.25-≤1%

- **Regulation (EC) No 648/2004 on detergents / Labelling for contents**

phosphates	≥5 - <15%
non-ionic surfactants	<5%

- **Additional information** For the wording of the listed hazard phrases refer to section 16.

- **Composition/Ingredients**

Constituents according to EC-Regulation 648/2004:

- 5 - 15 % phosphates,
- < 5 % non-ionic surfactants,
- further constituents: amines, organic acid salts, inhibitors and solubilizers.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **General advice:** In case of unconsciousness bring patient into stable side position for transport.

- **After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

- **After skin contact** Instantly rinse with water.

- **After eye contact**

Use eye protection.

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Rinse immediately opened eye for several minutes under running water. Then consult doctor.

- After swallowing

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; instantly call for medical help.

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

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures**- 5.1 Extinguishing media**

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.

- 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

Can be released in case of fire:

carbon monoxide (CO)

carbon dioxide (CO₂)

Nitrogen oxides (NO_x)

- 5.3 Advice for firefighters

- **Protective equipment:** Wear full protective suit with self-contained breathing apparatus.

- Additional information

Endangered containers in the surrounding area should be cooled with a water-hose.

SECTION 6: Accidental release measures**- 6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep off unprotected persons

Ensure adequate ventilation

- 6.2 Environmental precautions:

Do not allow to enter drainage system, surface or ground water.

If large amounts are released, the authorities must be informed.

- 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

- 6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Open and handle container with care.

- **Information about protection against explosions and fires:** No special measures required.

- 7.2 Conditions for safe storage, including any incompatibilities

- **Storage** Store in cool, dry conditions in well sealed containers.

- Requirements to be met by storerooms and containers:

Observe official regulations on storage and handling of water hazardous substances

Store in original containers or in PE-containers.

- **Information about storage in one common storage facility:** Not required.

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- **Further information about storage conditions:** Protect from frost.
- **Storage class** 12 (VCI - Konzept, 2007)
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- 8.1 Control parameters

- **Components with critical values that require monitoring at the workplace:**

141-43-5 2-aminoethanol

WEL	Short-term value: 7.6 mg/m ³ , 3 ppm
	Long-term value: 2.5 mg/m ³ , 1 ppm
	Sk

- DNELs

102-71-6 Triethanolamine

Oral	DNEL (population)	13 mg/kg bw/day (Long-term, systemic effects)
Dermal	DNEL (worker)	6.3 mg/kg bw/day (Long-term, systemic effects)
	DNEL (population)	3.1 mg/kg bw/day (Long-term, systemic effects)
Inhalative	DNEL (worker)	5 mg/m ³ (Long-term - systemic and local effects)
	DNEL (population)	1.25 mg/m ³ (Long-term - systemic and local effects)

7320-34-5 tetrapotassium pyrophosphate

Oral	DNEL (population)	>70 mg/kg bw/day (Long-term, systemic effects)
Inhalative	DNEL (worker)	2.79-44.08 mg/m ³ (Long-term, systemic effects)
	DNEL (population)	0.68-10.87 mg/m ³ (Long-term, systemic effects)

141-43-5 2-aminoethanol

Oral	DNEL (population)	3.75 mg/kg bw/day (Long-term, systemic effects)
Dermal	DNEL (worker)	1 mg/kg bw/day (Long-term, systemic effects)
	DNEL (population)	0.24 mg/kg bw/day (Long-term, systemic effects)
Inhalative	DNEL (worker)	3.3 mg/m ³ (Long-term - local effects)
	DNEL (population)	2 mg/m ³ (Long-term - local effects)

- PNECs

102-71-6 Triethanolamine

PNEC water	0.32 mg/l (freshwater)
	0.032 mg/l (Seawater)
PNEC	10 mg/l (sewage plant)
PNEC	0.151 mg/kg dw (soil)
PNEC sediment	1.7 mg/kg dw (freshwater)
	0.17 mg/kg dw (Seawater)

7320-34-5 tetrapotassium pyrophosphate

PNEC water	0.05 mg/l (freshwater)
	0.005 mg/l (Seawater)
PNEC	50 mg/l (sewage plant)

141-43-5 2-aminoethanol

PNEC water	0.085 mg/l (freshwater)
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PNEC sediment	0.0085 mg/l (marine water) 0.434 mg/kg dw (freshwater) 0.0434 mg/kg dw (marine water)
PNEC soil	0.0367 mg/kg dw (soil)
PNEC STP	100 mg/l (sewage plant)

- **Additional information:** The lists that were valid during the compilation were used as basis.

- 8.2 Exposure controls

- Personal protective equipment

- General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.

Gases, fumes and aerosols should not be inhaled.

- Breathing equipment:

Respiratory protection mask is not required if appropriately used according to specifications.

- Recommended filter device for short term use:

Combination filter AB-NO-P3

Take care of limitations and rules for the use of breathing protection equipment (DGUV Regel 112-190).

- Protection of hands: Protective gloves.

- Material of gloves

Butyl rubber, BR

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- Penetration time of glove material

Material of gloves is recommended for a short-term single use to protect from splashes. For permanent usage contact manufacturer of gloves.

- Eye protection: Safety glasses

- Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

- General Information

- Appearance:

Form:	Fluid
Colour:	Yellow
Smell:	Characteristic

pH-value at 20 °C:	ca. 10.2
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	> 100 °C

- **Flash point:** Product is non-flammable nor potentially explosive

- **Self-inflammability:** Product is not selfigniting.

- **Explosive properties:** Product is not potentially explosive

- **Density at 20 °C** ca. 1.16 g/cm³

- **Solubility in / Miscibility with Water:** Fully miscible

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- 9.2 Other information	No further relevant information available.
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SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**
strong oxidizing agents
Acids
- **10.6 Hazardous decomposition products:**
Formation of carbon monoxide and carbon dioxide in case of fire.
Nitrogen oxides (NOx)

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values that are relevant for classification:**

7320-34-5 tetrapotassium pyrophosphate

Oral	LD50	2,440 mg/kg (rat, male)
		>2,000 mg/kg (mus)

Dermal	LD50	>7,940 mg/kg (rabbit)
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141-43-5 2-aminoethanol

Oral	LD50	1,515 mg/kg (rat)
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Dermal	LD50	2,504 mg/kg (rbt)
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fatty alcohol alkoxyate

Oral	LD50	3,200 mg/kg (rat)
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61791-14-8 Amines, coco alkyl, ethoxylated

Oral	LD50	500-2,000 mg/kg (rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Subacute to chronic toxicity:**
- **Germ cell mutagenicity:** Is not known as germ cell mutagen.
- **Carcinogenicity:** No evidence of this effect is reported.
- **Reproductive toxicity:** Is not known to be toxic to reproduction.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
- **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.

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- **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.

SECTION 12: Ecological information

- 12.1 Toxicity

- Aquatic toxicity:

7320-34-5 tetrapotassium pyrophosphate

LC 50 / 96 h	>100 mg/l (Oncorhynchus mykiss)
LC 50 / 48 h	>100 mg/l (Daphnia magna)
LC 0 / 48 h	>750 mg/l (Leuciscus idus)
EC 50 / 48 h	>100 mg/l (Daphnia magna)
EC 50 / 72 h	>100 mg/l (Desmodesmus subspicatus)
EC 50 / 3 h	>1,000 mg/l (bacteria)

141-43-5 2-aminoethanol

LC 50 / 96 h	150 mg/l (Oncorhynchus mykiss)
	170 mg/l (Carassius auratus)
LC 50 / 48 h	224 mg/l (Leuciscus idus)
EC 50 / 48 h	65 mg/l (Daphnia magna)
EC 50 / 72 h	15 mg/l (Scenedesmus subspicatus)
	2.5 mg/l (Selenastrum capricornutum)

fatty alcohol alkoxylate

LC 50 / 96 h	1-10 mg/l (Leuciscus idus)
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61791-14-8 Amines, coco alkyl, ethoxylated

LC 50 / 96 h	1-10 mg/l (Brachydanio rerio)
	1.9 mg/l (Oncorhynchus mykiss)
EC 50 / 48 h	1-10 mg/l (Daphnia magna)
EC 50 / 16 h	480 mg/l (Pseudomonas putida)
EC 10 / 16 h	52 mg/l (Pseudomonas putida)

- 12.2 Persistence and degradability

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

- **12.3 Bioaccumulative potential** No further relevant information available.

- **12.4 Mobility in soil** No further relevant information available.

- Additional ecological information:

- General notes:

Do not allow to enter drainage system, surface or ground water
 Water hazard class 1 (Self-assessment): slightly hazardous for water.

- 12.5 Results of PBT and vPvB assessment

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

- 13.1 Waste treatment methods

- Recommendation

A used product should be recycled or used in other contexts, otherwise be handed over to an appropriate disposal site.

- Waste disposal key number:

Since 01/01/99 the waste code numbers have not only been product-related but are also essentially application-related. The valid waste code number of the application can be obtained from the European waste catalogue.

- **Uncleaned packagings:** Disposal must be made according to official regulations.

- Recommendation:

Rented packaging: After optimal emptying, close immediately and return to the supplier without cleaning. Care should be taken that no other materials get into the packaging.

Other containers: After complete emptying and cleaning, send to be reconditioned or recycled.

- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

SECTION 14: Transport information

- 14.1 UN-Number - ADR, IMDG, IATA	Void
- 14.2 UN proper shipping name - ADR, IMDG, IATA	Void
- 14.3 Transport hazard class(es) - ADR, IMDG, IATA - Class	Void
- 14.4 Packing group - ADR, IMDG, IATA	Void
- 14.5 Environmental hazards: - Marine pollutant:	Not applicable. No
- 14.6 Special precautions for user	Not applicable.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
- Transport/Additional information:	Not dangerous according to the above specifications.
- UN "Model Regulation":	Void

SECTION 15: Regulatory information

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

- Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

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- Hazard pictograms

GHS05

- Signal word Danger**- Hazard-determining components of labelling:**

2-aminoethanol

fatty alcohol alkoxyolate

Amines, coco alkyl, ethoxylated

- Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

- Precautionary statements

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water/-

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

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

P362 Take off contaminated clothing.

- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3**- National regulations****- Information about limitation of use:**

Employment restrictions concerning young persons must be observed.

- VOC: 2.4% volatile organic compounds (Council Directive 2010/75/EC).**- 15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Application: Directions for use: please refer to the Technical Information Sheet**- Relevant phrases**

Complete wording of hazard statements and risk phrases (H- and R-phrases) mentioned in section 3.

These phrases refer to the constituents. The labelling for this product is stated in section 2.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

- Department issuing data specification sheet: see item 1: Informing department**- Contact:**

Frau S. Ademoglu

Frau L. Hüser

Herr G. März

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- Abbreviations and acronyms:*RPE: Respiratory Protective Equipment**RCR: Risk Characterisation Ratio (RCR= PEC/PNEC)**ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally Harmonized System of Classification and Labelling of Chemicals**CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)**DNEL: Derived No-Effect Level (REACH)**PNEC: Predicted No-Effect Concentration (REACH)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 4: Acute toxicity - oral – Category 4**Skin Corr. 1B: Skin corrosion/irritation – Category 1B**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Dam. 1: Serious eye damage/eye irritation – Category 1**Eye Irrit. 2: Serious eye damage/eye irritation – Category 2**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3**Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1**Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3***- * Data compared to the previous version altered.**