Printing date 25.01.2017 Version number 106 Revision: 25.01.2017

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

- 1.1 Product identifier
- Trade name Cleaner 12
- 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:

PERKUTE - Maschinenbau GmbH

Düsterbergstr. 10 D-48432 Rheine Tel. ++ 49 / 59 71 / 80 81 68 - 0 Fax ++ 49 / 59 71 / 80 81 68 - 1 E-Mail: info@perkute.de

- Informing department: Product safety department
- 1.4 Emergency telephone number:

Poison Control Center, Mainz Tel. 00 49 / 61 31 / 19 240

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

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

P264 Wash 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.

P362 Take off contaminated clothing.

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

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

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

(Contd. on page 2)

Printing date 25.01.2017 Version number 106 Revision: 25.01.2017

Trade name Cleaner 12

(Contd. of page 1)

- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- 3.2 Mixtures
- Description: Mixture of the substances listed below with harmless additions (aqueous solution).

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

- 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.

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.

GB

Printing date 25.01.2017 Version number 106 Revision: 25.01.2017

Trade name Cleaner 12

(Contd. of page 2)

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

- 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 (NOx)

- 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 harzardous substances Store in original containers or in PE-containers.

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

(Contd. on page 4)

Printing date 25.01.2017 Version number 106 Revision: 25.01.2017

Trade name Cleaner 12

(Contd. of page 3)

- 8.1 Control parameters

- Com	- Components with critical values that require monitoring at the workplace:		
141-4	141-43-5 2-aminoethanol (< 2.5%)		
WEL	Short-term value: 7.6 mg/m³, 3 ppm Long-term value: 2.5 mg/m³, 1 ppm Sk		
- DNELs			

7320-34-5	7320-34-5 tetrapotassium pyrophosphate		
Oral	Oral DNEL (population) > 70 mg/kg bw/day (Long-term - systemic effects)		
Inhalative DNEL (population) 0.68 - 10.87 mg/m³ (Long-term - systemic effects)		0.68 - 10.87 mg/m³ (Long-term - systemic effects)	
	DNEL (worker)	2.79 - 44.08 mg/m³ (Long-term - systemic effects)	
141-43-5 2	141-43-5 2-aminoethanol		
Oral	Oral DNEL (population) 3.75 mg/kg bw/day (Long-term - systemic effects)		
Dermal	DNEL (population)	0.24 mg/kg bw/day (Long-term - systemic effects)	
	DNEL (worker)	1 mg/kg bw/day (Long-term - systemic effects)	
Inhalative DNEL (population) 2 mg/m³ (Long-term - systemic and local effects)		2 mg/m³ (Long-term - systemic and local effects)	
	DNEL (worker)	3.3 mg/m³ (Long-term - systemic and local effects)	

- PNECs

7320-34-5 tetrap	7320-34-5 tetrapotassium pyrophosphate		
PNEC	50 mg/l (sewage treatment plant)		
PNEC aqua	0.05 mg/l (fresh water)		
	0.005 mg/l (marine water)		
141-43-5 2-amin	141-43-5 2-aminoethanol		
PNEC	0.035 mg/kg dw (soil)		
PNEC STP	100 mg/l (sewage treatment plant)		
PNEC aqua	0.085 mg/l (fresh water)		
0.0085 mg/l (marine water)			
PNEC sediment	0.425 mg/kg dw (fresh water)		
	0.0425 mg/kg dw (marine water)		

- 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: Short term filter device:
- 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.

(Contd. on page 5)

Printing date 25.01.2017 Version number 106 Revision: 25.01.2017

Trade name Cleaner 12

(Contd. of page 4)

- 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

- Change in condition

Melting point/Melting range: Not determined **Boiling point/Boiling range:** > 100 °C

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

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

- Danger of explosion: Product is not potentially explosive

- Density at 20 °C ca. 1.16 g/cm³

- Solubility in / Miscibility with

Water: Fully miscible

- **9.2 Other information** No further relevant information available.

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 2440 mg/kg (rat, male)

(Contd. on page 6)

Printing date 25.01.2017 Version number 106 Revision: 25.01.2017

Trade name Cleaner 12

		(Contd. of page 5)	
		> 2000 mg/kg (mus)	
Dermal	LD50	> 7940 mg/kg (rab)	
Inhalative	LC 50 / 4 h	> 1.1 mg/l (rat)	
141-43-5 2	141-43-5 2-aminoethanol		
Oral	LD50	1515 mg/kg (rat)	
Dermal	LD50	1025 mg/kg (rbt)	
fatty alco	fatty alcohol alkoxylate		
Oral	LD50	3200 mg/kg (rat) (BASF-Test)	
61791-14-	61791-14-8 Amines, coco alkyl, ethoxylated		
Oral	LD50	500-2000 mg/kg (rat)	

- Primary irritant effect:
- Skin corrosion/irritation

Causes skin irritation.

- Serious eye damage/irritation

Causes serious eve damage.

- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Subacute to chronic toxicity:
- Germ cell mutagenicity: No data available.
- Carcinogenicity: No data available.
- Reproductive toxicity: No data available.
- 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.
- 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			
EC 50 / 3 h	> 1000 mg/l (Bacteria)		
EC 50 / 48 h	> 100 mg/l (Daphnia magna)		
EC 50 / 72 h	> 100 mg/l (Desmodesmus subspicatus)		
LC 0 / 48 h	LC 0 / 48 h > 750 mg/l (Leuciscus idus)		
LC 50 / 48 h	LC 50 / 48 h > 100 mg/l (Daphnia magna)		
LC 50 / 96 h	> 100 mg/l (Oncorhynchus mykiss)		
141-43-5 2-a	141-43-5 2-aminoethanol		
EC 50 / 48 h	65 mg/l (Daphnia magna)		
EC 50 / 72 h	15 mg/l (Scenedesmus subspicatus)		
	2.5 mg/l (Selenastrum capricornutum)		
LC 50 / 48 h	LC 50 / 48 h 224 mg/l (Leuciscus idus)		
LC 50 / 96 h	150 mg/l (Oncorhynchus mykiss)		
	170 mg/l (Carassius auratus)		
	(Contd on page 7)		

(Contd. on page 7)

Printing date 25.01.2017 Version number 106 Revision: 25.01.2017

Trade name Cleaner 12

(Contd. of page 6)

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	fatty alcohol	fatty alcohol alkoxylate		
Ī	LC 50 / 96 h	1-10 mg/l (Leuciscus idus)		
Ī	61791-14-8 Amines, coco alkyl, ethoxylated			
Ī	EC 10 / 16 h	52 mg/l (Pseudomonas putida)		
	EC 50 / 16 h	480 mg/l (Pseudomonas putida)		
	EC 50 / 48 h	1-10 mg/l (Daphnia magna)		
	LC 50 / 96 h	1-10 mg/l (Brachydanio rerio)		
		1.9 mg/l (Oncorhynchus mykiss)		

- 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:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

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

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

2—3 11 21 11 11 11 11 11 11 11 11 11 11 11		
- 14.1 UN-Number - ADR, IMDG, IATA	Void	
- 14.2 UN proper shipping name - ADR, IMDG, IATA	Void	

(Contd. on page 8)

Printing date 25.01.2017 Version number 106 Revision: 25.01.2017

Trade name Cleaner 12

(Contd. of page 7)

	(Conta. or page 7
- 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.

- 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

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

P264 Wash 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.

P362 Take off contaminated clothing.

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

P332+P313 If skin irritation occurs: Get medical advice/attention.
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

GB -

Printing date 25.01.2017 Version number 106 Revision: 25.01.2017

Trade name Cleaner 12

(Contd. of page 8)

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.

H412 Harmful to aquatic life with long lasting effects.

Department issuing data specification sheet: see item 1: Informing department

- 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 - 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 Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3