Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 24.01.2023 Versio

Version number 117.50 (replaces version 117.49)

Revision: 24.01.2023

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

- 1.1 Product identifier

- Trade name <u>Cleaner 10</u>
- UFI: 3940-G0AF-400A-WRJH
- **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: This is an English-language document designed for the European region. For the emergency number and other country-specific data, please refer to the specific national versions of this safety data sheet. Counselling Centre for Poisoning, Mainz Tel (±49) 61 31 / 19 240

Tel. (+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

Acute Tox. 4H332 Harmful if inhaled.Skin Corr. 1BH314 Causes severe skin burns and eye damage.Eye Dam. 1H318 Causes serious eye damage.STOT SE 3H335 May cause respiratory irritation.Aquatic Chronic 3H412 Harmful to aquatic life with long lasting effects.

- 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



- Signal word Danger

- *Hazard-determining components of labelling:* 2-aminoethanol
- Hazard statements H332 Harmful if inhaled. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.
- Precautionary statements
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

(Contd. on page 2)

Printing date 24.01.2023 Version number 117.50 (replaces version 117.49)

Revision: 24.01.2023

Trade name Cleaner 10

(Contd. of page 1)

	(conta: of page 1)
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
P403	Store in a well-ventilated place.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
- 2.3 Other ha	azards
Deculto of D	PRT and vPvP accessment

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).

- Dangerous components:			
CAS: 141-43-5	2-aminoethanol	50-100%	
EINECS: 205-483-3	Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302;		
	Acute Tox. 4, H312; Acute Tox. 4, H332; STOT SE 3, H335;		
Reg.nr.: 01-2119486455-28 Aquatic Chronic 3, H412			
	Specific concentration limit: STOT SE 3; H335: C \geq 5 %		
- Additional information For the wording of the listed hazard phrases refer to section 16.			

SECTION 4: First aid measures

- 4.1 Description of first aid measures

- General advice:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

In case of unconsciousness bring patient into stable side position for transport.

- After inhalation Supply fresh air; consult doctor in case of symptoms.

- After skin contact

Instantly wash with water and soap and rinse thoroughly. If skin irritation persists, seek medical advice. - After eye contact

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

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

Printing date 24.01.2023

Version number 117.50 (replaces version 117.49)

Revision: 24.01.2023

(Contd. of page 2)

Trade name Cleaner 10

 - 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: Nitrogen oxides (NOx) carbon monoxide (CO)
 - 5.3 Advice for firefighters

- **Protective equipment:** See section 8. Wear 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 and keep unprotected persons away. 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.
 - 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 Ensure good ventilation/exhaustion at the workplace. Avoid repeated or long-term skin contact.
- 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.
- Nicht geeignetes Behältermaterial: Aluminium, Kupfer, Zink.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.
- Storage class 8 B L (VCI Konzept, 2007)
- 7.3 Specific end use(s) No further relevant information available.

(Contd. on page 4)

EUE

Printing date 24.01.2023

Version number 117.50 (replaces version 117.49)

Revision: 24.01.2023

Trade name Cleaner 10

(Contd. of page 3)

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters - Components with critical values that require monitoring at the workplace: 141-43-5 2-aminoethanol IOELV (EU) Short-term value: 7.6 mg/m³, 3 ppm Long-term value: 2.5 mg/m³, 1 ppm Skin - DNELs 141-43-5 2-aminoethanol Oral DNEL (population) 1.5 mg/kg bw/day (Long-term, systemic effects) Dermal DNEL (worker) 3 mg/kg bw/day (Long-term, systemic effects) DNEL (population) 1.5 mg/kg bw/day (Long-term, systemic effects) Inhalative DNEL (worker) 1 mg/m³ (Long-term, systemic effects) 0.51 mg/m³ (Long-term - local effects) DNEL (population) 0.18 mg/m³ (Long-term, systemic effects) 0.28 mg/m³ (Long-term - local effects) - PNECs 141-43-5 2-aminoethanol 0.07 mg/l (freshwater) PNEC water 0.007 mg/l (marine water) PNEC sediment 0.357 mg/kg dw (freshwater) 0.0357 mg/kg dw (marine water) PNEC soil 1.29 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
- Appropriate engineering controls No further data; see item 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures
- Keep away from food, beverages and fodder. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Avoid contact with the eyes and skin. Gases, fumes and aerosols should not be inhaled.
- Breathing equipment: Use breathing protection in case of insufficient ventilation.
- Recommended filter device for short term use: Filter A
- Combination filter A-P2
- Hand protection Protective gloves (EN 374).
- 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.

Printing date 24.01.2023

Version number 117.50 (replaces version 117.49)

Revision: 24.01.2023

Trade name Cleaner 10

(Contd. of page 4)

- For the permanent contact gloves made of the following materials are suitable: Chloroprenkautschuk mit 0,5 mm Schichtdicke, PVC mit 0,7 mm Schichtdicke oder Nitrilkautschuk mit 0,4 mm Schichtdicke, (empfohlen: Schutzindex 6, entsprechend über 480 Minuten Permeationszeit nach EN 374).

Achtung! die tägliche Gebrauchsdauer eines Chemikalienschutzhandschuhs kann wegen der besonderen Bedingungen am Arbeitsplatz (mechanische Belastung, Temperatur) deutlich kürzer als die nach EN 374 ermittelte Permeationszeit sein.

- Eye/face protection Tightly sealed safety glasses.

- Body protection:

Standard protective working clothes, chemical resistant safety-shoes or wellingtons. If skin contact is possible, wear impenetrable protective clothing.

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties		
- General Information	• · · ·	
- Colour:	Colourless	
- Smell:	Characteristic	
- Melting point/freezing point:	Not determined	
- Boiling point or initial boiling point and boiling	100 %0	
range	100 °C	
- Flash point:	Product is non-flammable nor potentially explosive	
- pH at 20 °C	11.2	
- pH-value:		
- Viscosity: - Kinematic viscosity	Not determined.	
- dynamic:	Not determined.	
- Solubility	Not determined.	
- Water:	Fully miscible	
- Vapour pressure at 20 °C:	0.3 hPa (141-43-5 2-aminoethanol)	
- Density and/or relative density		
- Density at 20 °C	1.03 g/cm³	
- 9.2 Other information		
- Appearance:		
- Form:	Fluid	
- Important information on protection of health		
and environment, and on safety.		
- Self-inflammability:	Product is not selfigniting.	
- Explosive properties:	Product is not potentially explosive	
-Information with regard to physical hazard	A	
classes	"	
- Explosives	Void	
- Flammable gases	Void	
- Aerosols	Void	
- Oxidising gases	Void	
- Gases under pressure	Void	
- Flammable liquids	Void	
- Flammable solids	Void	
 Self-reactive substances and mixtures 	Void	
- Pyrophoric liquids	Void	
- Pyrophoric solids	Void	
	(Contd. on page 6)	

Printing date 24.01.2023

Version number 117.50 (replaces version 117.49)

Revision: 24.01.2023

(a) () ()

Trade name Cleaner 10

		(Contd. of page 5)
- Self-heating substances and mixtures	Void	
- Substances and mixtures, which emit flammabl	e	
gases in contact with water	Void	
- Oxidising liquids	Void	
- Oxidising solids	Void	
- Organic peroxides	Void	
- Corrosive to metals	Void	
- Desensitised explosives	Void	

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 acids
- strong oxidizing agents

- 10.6 Hazardous decomposition products: No dangerous decomposition products known

SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- Acute toxicity
- Harmful if inhaled.

- LD/LC50 values that are relevant for classification:

141-43-5 2-aminoethanol		
Oral	LD50	1,515 mg/kg (rat)
		1,750-2,050 mg/kg (rat)
	LD50	1,515 mg/kg (rat) 1,750-2,050 mg/kg (rat) 2,504 mg/kg (rbt)
Inhalative	LC 50 / 4 h	>1.3 mg/l (rat)

- Skin corrosion/irritation
- Causes severe skin burns and eye damage.
- Serious eye damage/irritation
- Causes serious eye damage.
- 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
- May cause respiratory irritation.
- 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.

(Contd. on page 7)

Printing date 24.01.2023

Version number 117.50 (replaces version 117.49)

Revision: 24.01.2023

(Contd. of page 6)

Trade name Cleaner 10

- 11.2 Information on other hazards

- Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- 1	2.1	Toxicity
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- Aquatic toxicity:			
141-43-5 2-aminoethanol			
LC 50 / 96 h	LC 50 / 96 h 150 mg/l (Oncorhynchus mykiss)		
	329 mg/l (Lepomis macrochirus)		
	349 mg/l (Cyprinus carpio)		
	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 / 16 h	110 mg/l (Pseudomonas putida) ((DIN 38412 part 8))		
EC 50 / 72 h	15 mg/l (Scenedesmus subspicatus)		
	2.5 mg/l (Selenastrum capricornutum)		
EC 50 / 3 h	>1,000 mg/l /Belebt (activated sludge (DEV - L2)) (OECD 209 (Activated Sludge, Resp. Inhibition Test))		
- 12.2 Persistence and degradability			
141-43-5 2-aminoethanol			
Biodegradab	ility 90-100 % (OECD 301 F)		
Biodegradability >90 % (OECD 301 A (DOC Die-Away Test))			
	nation: The product is readily biodegradable.		
	umulative potential No bioaccumulation / in soil No further relevant information available.		
	of PBT and vPvB assessment		
- PBT: Not applicable.			
- vPvB: Not applicable.			
- 12.6 Endocrine disrupting properties			
The product does not contain substances with endocrine disrupting properties 12.7 Other adverse effects			
- Respiratory inhibition of communal activated sludge EC 20 (mg/l according to ISO 8192 B):			
141-43-5 2-aminoethanol			
EC 20	>1,000 mg/l (OECD 209 / ISO 8192)		
EC 50 / 17 h	110 mg/l (Pseudomonas putida)		
- Additional ecological information:			
- General notes:			
Water hazard class 2 (Self-assessment): hazardous for water. Do not allow product to reach ground water, water bodies or sewage system.			
Do not allow product to reach ground water, water bodies of sewage system.			

(Contd. on page 8)

EUE

Printing date 24.01.2023

Version number 117.50 (replaces version 117.49)

Revision: 24.01.2023

Trade name Cleaner 10

(Contd. of page 7)

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods

The following advice is related to new material and not to any processed products. In case of a mixture with other products other disposal methods may become necessary. If in doubt seek advice from product supplier or from local authorities.

- 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:

Containers may be completely emptied and cleaned and send to be reconditioned or recycled.

SECTION 14: Transport information

- 14.1 UN number or ID number - ADR/RID/ADN, IMDG, IATA	UN2491
- 14.2 UN proper shipping name - ADR/RID/ADN - IMDG, IATA	2491 ETHANOLAMINE SOLUTION MIXTURE ETHANOLAMINE SOLUTION
- 14.3 Transport hazard class(es)	
- ADR/RID/ADN - Class - Label	8 (C7) Corrosive substances. 8
- IMDG, IATA - Class - Label	8 Corrosive substances. 8
- 14.4 Packing group - ADR/RID/ADN, IMDG, IATA	III
- 14.5 Environmental hazards: - Marine pollutant:	No
- 14.6 Special precautions for user - Kemler Number: - EMS Number: - Segregation groups - Stowage Category - Segregation Code	Warning: Corrosive substances. 80 F-A,S-B (SGG18) Alkalis A SG35 Stow "separated from" SGG1-acids
 - 14.7 Maritime transport in bulk according to IM instruments 	O Not applicable.
	(Contd. on page 9) EUE

⁻ Recommendation Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Printing date 24.01.2023

Version number 117.50 (replaces version 117.49)

Revision: 24.01.2023

Trade name Cleaner 10

	(Contd. of page 8
- Transport/Additional information:	
- ADR/RID/ADN - Limited quantities (LQ) - Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
- IMDG - Limited quantities (LQ) - Excepted quantities (EQ)	5L Código E4 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
- UN "Model Regulation":	UN 2491 ETHANOLAMINE SOLUTION MIXTURE, 8 III

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



- Signal word Danger

- Hazard-determining components of labelling: 2-aminoethanol
- Hazard statements H332 Harmful if inhaled. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.

- Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.
- P403 Store in a well-ventilated place.
- *P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*

- Directive 2012/18/EU

- Named dangerous substances - ANNEX I None of the ingredients is listed.

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 24.01.2023

Version number 117.50 (replaces version 117.49)

Revision: 24.01.2023

Trade name Cleaner 10

- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

(Contd. of page 9)

- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

- REGULATION (EU) 2019/1148

- Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

 Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

- National regulations

- Information about limitation of use: Employment restrictions concerning young persons must be observed.

- Other regulations, limitations and prohibitive regulations

- Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

- VOC (EU) 618.0 g/l

- 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
- UFI market placements:
- **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.
- Department issuing data specification sheet: see item 1: Informing department
- Date of previous version: 24.11.2022
- Version number of previous version: 117.49

- Abbreviations and acronyms:

RPE: Respiratory Protective Equipment RCR: Risk Characterisation Ratio (RCR= PEC/PNEC) ADR: Accord relatif au transport international 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) ISO: International Organisation for Standardisation DNEL: Derived No-Effect Level (REACH) PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative Acute Tox. 4: Acute toxicity - Category 4 Skin Corr. 1B: Skin corrosion/irritation – Category 1B

(Contd. on page 11)

Printing date 24.01.2023

Version number 117.50 (replaces version 117.49)

Revision: 24.01.2023

Trade name Cleaner 10

(Contd. of page 10)

EUE ----

Eye Dam. 1: Serious eye damage/eye irritation – Category 1 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

- * Data compared to the previous version altered.