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- · 1.1 Product identifier
- · Trade name: <u>PuraDES HeptaPURE KONZ</u>
- 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 Disinfectants for instruments
- · 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier: PRISMAN GmbH Otto Hahn Ring 6-18 D-64653 Lorsch Germany
- Further information obtainable from: Abteilung Produktsicherheit
- Alexander.Metz@prisman.de
- · 1.4 Emergency telephone number: ++49 (0)6251 866980-0, Mo Fr 8-18 Uhr

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008
- Acute Tox. 4 H302 Harmful if swallowed.
- Skin Corr. 1A H314 Causes severe skin burns and eye damage.
- *Eye Dam. 1* H318 Causes serious eye damage.
- Aquatic Acute 1 H400 Very toxic to aquatic life.
- Aquatic Chronic 1 H410 Very toxic 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 GB CLP regulation.
- Hazard pictograms



· Signal word Danger

• *Hazard-determining components of labelling: didecyldimethylammonium chloride 1-aminopropan-2-ol*

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

· Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

- H410 Very toxic to aquatic life with long lasting effects.
- · Precautionary statements
- *P273 Avoid release to the environment.*
- P280 Wear protective gloves / eye protection.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER/doctor.
- *P501* Dispose of contents/container in accordance with local/regional/national/international regulations.

· 2.3 Other hazards

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.

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· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients	

· 3.2 Mixtures

• **Description:** Mixture of substances listed below with nonhazardous additions.

	fatty alcohol polyglycol ethers	10-25%
	() Eye Irrit. 2, H319	
CAS: 78-96-6	1-aminopropan-2-ol	2.5-10%
EINECS: 201-162-7	(4) Skin Corr. 1B, H314	
Index number: 603-082-00-1		
RTECS: UA 5775000		
Reg.nr.: 01-2119475331-43-0000		
CAS: 7173-51-5	didecyldimethylammonium chloride	2.5-10%
EINECS: 230-525-2	Skin Corr. 1B, H314	
Index number: 612-131-00-6	Aquatic Chronic 2, H411	
Reg.nr.: 01-2119457558-25-XXXX	Acute Tox. 4, H302	
CAS: 2372-82-9	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	2.5-10%
EINECS: 219-145-8		
Reg.nr.: 01-2119980592-29-xxxx	💩 STOT RE 2, H373	
	\bigotimes Skin Corr. 1A, H314	
	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
CAS: 64-17-5	ethanol	<i>≤</i> 2.5%
EINECS: 200-578-6	🛞 Flam. Lig. 2, H225	
Index number: 603-002-00-5	* 1 T	
RTECS: KQ 6300000		
Reg.nr.: 01-2119457610-43-XXXX		

• 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 information:
- Immediately remove any clothing soiled by the product.

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

- After inhalation:
- Take affected persons into fresh air and keep quiet.
- In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
- If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:
- Rinse out mouth and then drink plenty of water.
- Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

- 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.

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SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture
- In case of fire, the following can be released: Carbon monoxide (CO)

Nitrogen oxides (NOx)

- Under certain fire conditions, traces of other toxic gases cannot be excluded.
- 5.3 Advice for firefighters
- Protective equipment: Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- · 6.2 Environmental precautions:
- Do not allow product to reach sewage system or any water course.
- Inform respective authorities in case of seepage into water course or sewage system. Dilute with plenty of water.
- Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralising agent.
- Dispose 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 disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling Keep receptacles tightly sealed.
- Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
- · Information about storage in one common storage facility: Store away from foodstuffs.
- Further information about storage conditions: Store in upright position.
- Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

64-17-5 ethanol

WEL Long-term value: 1920 mg/m³, 1000 ppm

• Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

• Appropriate engineering controls No further data; see item 7.

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- · Individual protection measures, such as personal protective equipment • General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work. Avoid contact with the eyes.
- Avoid contact with the eyes and skin. · Respiratory protection: Not required.
- · Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:
- Rubber gloves
- For the permanent contact gloves made of the following materials are suitable: Neoprene gloves
- As protection from splashes gloves made of the following materials are suitable: Natural rubber, NR
- Butyl rubber, BR Fluorocarbon rubber (Viton)
- · Eye/face protection



Tightly sealed goggles

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Physical state
- · Colour:
- · Odour:
- · Odour threshold:
- *Melting point/freezing point:*
- · Boiling point or initial boiling point and boiling range
- · Flammability
- · Lower and upper explosion limit
- · Lower:
- · Upper:
- · Flash point:

Fluid According to product specification Amine-like Not determined. Undetermined.

100 °C Not applicable.

Not determined. Not determined. $>100 \,^{\circ}C$

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Decomposition temperature:	Not determined.
pH at 20 °C	>11
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value,) Not determined.
Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density at 20 °C:	1.01 g/cm^3
Relative density	Not determined.
Vapour density	Not determined.
9.2 Other information	
Appearance:	
Form:	Fluid
Important information on protection of health	and
environment, and on safety.	
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Organic solvents:	2.0 %
Water:	56.0 %
VOC (EC)	2 %
Change in condition	
Evaporation rate	Not determined.
Information with regard to physical hazard clas	sses
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
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable	
gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
CONTRACTO IN MICHING	

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: No further relevant information available.

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· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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SECTION 11: Toxicological information

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

· LD/LC50 values rel	evant for classification:
ATE (Acute Toxicit	w Estimatos)

AIL (ACU	le Toxicity	Estimates)
Oral	LD50	1,515 mg/kg

78 06 6 1	aminonron	an 2 al

Oral	LD50	2,813 mg/kg (rat)
Dermal	LD50	1,600 mg/kg (rabbit)

Inhalative LC50/4 h > 3,960.71 mg/l (rat)

7173-51-5 didecyldimethylammonium chloride

 Oral
 LD50
 238 mg/kg (rat)

 Dermal
 LD50
 3,342 mg/kg (rat)

2372-82-9	N-(3-amii	nopropyl)-N-dodecylpropane-1,3-diamine
Oral	LD50	261 mg/kg (rat)

Dermal LD50 >600 mg/kg (rat)

- 64-17-5 ethanol Oral LD50 >2,000 mg/kg (rat)
- Dermal LD50 >2,000 mg/kg (rabbit)

Inhalative LC50/4 h > 20 mg/l (rat)

Skin corrosion/irritation Causes severe skin burns and eye damage.

· Serious eye damage/irritation Causes serious eye damage.

· Additional toxicological information:

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

• 11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

· 12.1 Toxicity

78-96-6	1-aminopropan-2-ol	
EC50	>261 mg/l (Bel)	
	108.82 mg/l (W)	
LC50/96	h 340 mg/l (fish)	
7173-51-	5 didecyldimethylammonium chloride	
EC50	mg/kg (rat)	
EC50	0.062 mg/l (daphnia)	
LC50/96	h 0.19 mg/l (fish)	
2372-82-	9 N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	
EC50	0.01-0.1 mg/l (A)	
	18 mg/l (Bel)	
	0.073 mg/l (daphnia)	

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LC50/96h	0.68 mg/l (j	fish)

64-17-5 ethanol

EC50 >10,000 mg/kg (daphnia)

EC50 275 mg/l (A)

>10,000 mg/l (daphnia)

LC50/96h 15,300 mg/l (fish)

LC50/48h 5,012 mg/l (daphnia)

· 12.2 Persistence and degradability A part of the components is heavily biodegradable.

- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.

· 12.5 Results 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
- · Remark: Very toxic for fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into the ground. Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

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

- · Uncleaned packaging:
- *Recommendation:* Non contaminated packagings may be treated like household garbage.
- *Recommended cleansing agents: Water, if necessary together with cleansing agents.*

· 14.1 UN number or ID number · ADR, IMDG, IATA	UN1903
· 14.2 UN proper shipping name	
ADR	1903 DISINFECTANT, LIQUID, CORROSIVE, N.O.S (N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine didecyldimethylammonium chloride) ENVIRONMENTALLY HAZARDOUS
· IMDG	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (N-(2 aminopropyl)-N-dodecylpropane-1,3-diamine didecyldimethylammonium chloride), MARIN POLLUTANT

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IATA	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (N-(2 aminopropyl)-N-dodecylpropane-1,3-diamine didecyldimethylammonium chloride)
14.3 Transport hazard class(es)	
ADR, IMDG	
Class	8 Corrosive substances.
Label	8
IATA	
Class	8 Corrosive substances.
Label	8
14.4 Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards: Marine pollutant:	No Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
14.6 Special precautions for user	Warning: Corrosive substances.
Hazard identification number (Kemler code):	80
EMS Number:	F-A,S-B
14.7 Maritime transport in bulk according to IM instruments	<i>IO</i> Not applicable.
Transport/Additional information:	
ADR	
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
IMDG	
Limited quantities (LQ)	5L Code: El
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

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

GHS label elements

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

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TT 1 • ·	(Contd. of pa
Hazard pictog	rams
GHS05 GH	1507 GHS09
Signal word D	Danger
Hazard-detern	nining components of labelling:
didecyldimethy	ylammonium chloride
1-aminopropa	n-2-ol
N-(3-aminopro	pyl)-N-dodecylpropane-1,3-diamine
Hazard statem	ients
H302 Harmful	l if swallowed.
H314 Causes	severe skin burns and eye damage.
H410 Very tox	tic to aquatic life with long lasting effects.
Precautionary	
P273	Avoid release to the environment.
P280	Wear protective gloves / eye protection.
P303+P361+1	P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin water [or shower].
P305+P351+P	P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lense present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P501	Dispose of contents/container in accordance with local/regional/national/internation

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

• Seveso category E1 Hazardous to the Aquatic Environment

• Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t

• Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t

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

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

· Department issuing SDS: Abteilung Produktsicherheit

· Contact: Hr. Dr. Metz

• Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

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IMDG: International Maritime Code for Dangerous Goods	10-7
IATA: International Air Transport Association	
GHS: Globally Harmonised System of Classification and Labelling of Chemicals	
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)	
VOC: Volatile Organic Compounds (USA, EU)	
LC50: Lethal concentration, 50 percent	
LD50: Lethal dose, 50 percent	
PBT: Persistent, Bioaccumulative and Toxic	
vPvB: very Persistent and very Bioaccumulative	
Flam. Liq. 2: Flammable liquids – Category 2	
Acute Tox. 3: Acute toxicity – Category 3	
Acute Tox. 4: Acute toxicity – Category 4	
Skin Corr. 1A: Skin corrosion/irritation – Category 1A	
Skin Corr. 1B: Skin corrosion/irritation – Category 1B	
Eye Dam. 1: Serious eye damage/eye irritation – Category 1	
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2	
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2	
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1	
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1	
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2	
• * Data compared to the previous version altered.	
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