

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 28.05.2018

Version number 2

Revision: 28.05.2018

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

- **Date of compilation:** 20.05.2015
- **1.1 Product identifier**
- **Trade name:** Primax professionnelles Algen-Ex
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:** Algae remover
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:**
HGS Gebäudedienste GmbH
Dieselstr. 14-16
D-30827 Garbsen
Tel.: 05131 446936
Fax: 05131 445736
- **E-mail address of the competent person responsible for the Safety Data Sheet:** info@hgs-garbsden.de
- **Informing department:** Sales
- **1.4 Emergency telephone number:** As above or next toxicological information centre.

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

- **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 GHS09

- **Signal word** Danger
- **Hazard-determining components of labelling:**
Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides
- **Hazard statements**
H315 Causes skin irritation.
H318 Causes serious eye damage.
H410 Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.

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







- P273 *Avoid release to the environment.*
 P280 *Wear protective gloves/protective clothing/eye protection/face protection.*
 P302+P352 *IF ON SKIN: Wash with plenty of soap and 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.*
 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.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Aqueous solution

- **Dangerous components:**

CAS: 68391-01-5 EINECS: 269-919-4	Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides  Skin Corr. 1B, H314;  Eye Dam. 1, H318;  Aquatic Acute 1, H400 (M=10);  Aquatic Chronic 1, H410 (M=1);  Acute Tox. 4, H302	≥3-<5%
CAS: 7173-51-5 EINECS: 230-525-2 Index number: 612-131-00-6	Didcyldimethylammonium chloride  Acute Tox. 3, H301;  Skin Corr. 1B, H314;  Aquatic Acute 1, H400 (M=10);  Aquatic Chronic 1, H410 (M=1)	≥0.25-<1%

- **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 contaminated by the product.
- **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 continues, consult a doctor.
- **After eye contact:**
Rinse opened eye for several minutes under running water.
Remove contact lenses, if present and easy to do.
Use eye protection.
Call a doctor immediately.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Seek medical treatment.
- **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** symptomatic treatment

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents** none
- **5.2 Special hazards arising from the substance or mixture**
Can be released in case of fire:
Carbon monoxide (CO) and Carbon dioxide (CO₂)

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- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Avoid contact with skin and eyes.
Use breathing protection against the effects of fumes/dust/aerosol.
- **6.2 Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable containers.
Dispose of the material collected according to regulations.
- **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 contact with skin and eyes.
Do not inhale aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
Store in the original container.
Observe all local and national regulations for storage of water polluting products.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Store container in a well ventilated position.
Store in cool, dry conditions in well sealed containers.
- **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:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs

7173-51-5 Didecyldimethylammonium chloride

Dermal	DNEL long-term exposure - systemic effects	8.6 mg/kg bw/d (worker)
Inhalative	DNEL long-term exposure - systemic effects	18.2 mg/m ³ (worker)

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· **PNECs****7173-51-5 Didecyldimethylammonium chloride**

PNEC 0.595 mg/l (STP (sewage treatment plant)) (Assessment factor 10)

PNEC 2 µg/l (aqua (freshwater)) (Assessment factor 10)

0.29 µg/l (aqua (intermittent releases)) (Assessment factor 100)

0.2 µg/l (aqua (marine water)) (Assessment factor 100)

PNEC 2.82 mg/kg (sediment (freshwater)) (Assessment factor 1)

0.28 mg/kg (sediment (marine water)) (Assessment factor 10)

1.4 mg/kg (soil) (Assessment factor 50)

· **8.2 Exposure controls**· **Personal protective equipment**· **General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.

Instantly remove any contaminated garments.

Wash hands during breaks and at the end of the work.

Use skin protection cream for preventive skin protection.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Do not eat, drink or smoke while working.

· **Breathing equipment:** Use breathing protection when aerosol or mist is formed.· **Protection of hands:**

Protective gloves

To avoid skin problems reduce the wearing of gloves to the required minimum.

Check the permeability prior to each renewed use of the glove.

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**

Protective gloves should be replaced at first signs of wear.

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

· **Eye protection:** Safety glasses with side-shields (frame goggles) (e.g. EN 166)· **Body protection:**

Protective work clothing

Body protection must be chosen depending on activity and possible exposure.

· **Limitation and supervision of exposure into the environment**

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

SECTION 9: Physical and chemical properties· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**

Form:	liquid
Colour:	colourless
	clear

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· Smell:	characteristic
· Odour threshold:	not determined
· pH-value at 20 °C:	7.5
· Change in condition	
Melting point/freezing point:	not determined
Initial boiling point and boiling range:	~ 100 °C
· Flash point:	not applicable
· Inflammability (solid, gaseous)	Not applicable.
· Decomposition temperature:	Not determined.
· Self-inflammability:	Product is not selfigniting.
· Explosive properties:	Product is not explosive.
· Critical values for explosion:	
Lower:	Not determined.
Upper:	Not determined.
· Oxidising properties	not classified as oxidising
· Vapor pressure at 20 °C:	23 hPa
· Density at 20 °C:	~ 1.0 g/cm ³
· Relative density	Not determined.
· Vapour density (AIR = 1):	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	fully miscible
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
dynamic:	not determined
kinematic:	not determined
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** see 10.3
- **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
- **10.6 Hazardous decomposition products:** Carbon monoxide (CO) and Carbon dioxide (CO₂)

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:**

68391-01-5 Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides

Oral	LD50	~344 mg/kg (rat)
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Dermal	LD50	~3,340 mg/kg (rabbit)
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7173-51-5 Didecyldimethylammonium chloride

Oral	LD50	238 mg/kg (rat) (OECD 401)
Dermal	LD50	3,342 mg/kg (rabbit)

- **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:** no data available
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
According to present knowledge no CMR-effects known.
- **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:****68391-01-5 Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides**

LC50/96 h	0.28 mg/l (fathead minnow (<i>pimephales promelas</i>)) (US-EPA)
EC50/3 h	7.75 mg/l (bacteria) (OECD 209)
EC50/48 h	0.016 mg/l (water flea (<i>daphnia magna</i>)) (OECD 202)
ErC50/72 h	0.049 mg/l (green algae (<i>Scenedesmus capricornutum</i>)) (OECD 201)
NOEC	0.032 mg/l (fathead minnow (<i>pimephales promelas</i>)) (EPA-FIFRA) 34 d
NOEC/21 d	0.0042 mg/l (water flea (<i>daphnia magna</i>)) (EPA-FIFRA)

7173-51-5 Didecyldimethylammonium chloride

EC10/16 h	0.13 mg/l (<i>pseudomonas putida</i>) (DIN 38412 Part 8)
LC0/96 h	0.97 mg/l (zebra fish (<i>danio rerio</i>)) (OECD Guideline 203)
LC50/96 h	0.19 mg/l (fathead minnow (<i>pimephales promelas</i>)) (US-EPA) 1 mg/l (rainbow trout (<i>oncorhynchus mykiss</i>)) (OECD 203)
EC50/3 h	27.2 mg/l (bacteria)
EC50/3 h	11 mg/l (bacteria) (OECD 209)
EC50/48 h	0.057 mg/l (water flea (<i>daphnia magna</i>)) (OECD Guideline 202)
ErC50/72 h	0.062 mg/l (algae (<i>pseudokirchneriella subcapitata</i>)) (OECD Guideline 201)
EbC50/96 h	0.026 mg/l (algae (<i>selenastrum capricornutum</i>)) (OECD 201)
NOEC	0.01 mg/l (water flea (<i>daphnia magna</i>)) ((exposure time: 21d) OECD 211) 0.032 mg/l (zebra fish (<i>danio rerio</i>)) ((exposure time: 34d) OECD 210)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**

· **General notes:**

Very toxic to aquatic life with long lasting effects.
Do not allow product to reach ground water, water bodies or sewage system.
Water hazard class 2 (Self-assessment): hazardous for water

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- **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**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations.
- **European waste catalogue:**
Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN3082
- **14.2 UN proper shipping name**
- **ADR** Void
- **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((C12-C18) Alkyldimethylbenzylammonium chloride, DIDECYLDIMETHYLAMMONIUM CHLORIDE), MARINE POLLUTANT
- **IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((C12-C18) Alkyldimethylbenzylammonium chloride, DIDECYLDIMETHYLAMMONIUM CHLORIDE)
- **14.3 Transport hazard class(es)**
- **ADR**
- 
- **Class** 9 (M6) Miscellaneous dangerous substances and articles.
- **Label** 9
- **IMDG, IATA**
- 
- **Class** 9 Miscellaneous dangerous substances and articles.
- **Label** 9
- **14.4 Packing group**
- **ADR, IMDG, IATA** III
- **14.5 Environmental hazards:** Product contains environmentally hazardous substances: (C12-C18) Alkyldimethylbenzylammonium chloride

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· Marine pollutant:	Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
· Kemler Number:	90
· EMS Number:	F-A,S-F
· Stowage Category	A
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ):	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category:	3
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- Directive 2012/18/EU
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **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.
- **Decree to be applied in case of technical fault:** Directive 2012/18/EU does not apply.
- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water
- **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.

- **Reasons for changes:**
Changes in classification and labelling
Revised transport classification
- **Relevant phrases**
The(se) H-phrase(s) are those of the ingredient(s) and do(es) not necessarily represent the classification of the product.
H301 Toxic if swallowed.
H302 Harmful if swallowed.

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*H314 Causes severe skin burns and eye damage.**H318 Causes serious eye damage.**H400 Very toxic to aquatic life.**H410 Very toxic to aquatic life with long lasting effects.*

· **Department issuing SDS:**

C.S.B. GmbH Phone: +49 - 2151 - 652086-0
 Düsseldorf Str. 113 Fax: +49 - 2151 - 652086-9
 47809 Krefeld / Germany

· **Abbreviations and acronyms:**

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 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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 3: Acute toxicity – Category 3

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

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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