

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.11.2023

Version number 4 (replaces version 3)

Revision: 21.11.2023

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

1.1 Product identifier

Trade name: **Algae and Mildew Remover Longlife**

Article number: 10983, 10984, 10985

UFI: MND6-KNAP-U01P-4H9U

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

Biocide
Cleaning agent/ Cleaner

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH Tel. +49(0)911-642960
Lechstrasse 28 Fax. +49(0)911-644456
D 90451 Nürnberg e-mail info@akemi.de

Further information obtainable from:

Laboratory

1.4 Emergency telephone number:

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
Tel. +49(0)911-64296-59
Reachable during the following office hours:
Monday – Thursday from 07:30 a.m. to 16:30 p.m.
Friday from 07:30 a.m. to 13:30 p.m.

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. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

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



GHS05 GHS07 GHS09

Signal word

Danger

Hazard-determining components of labelling:

Quarternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chloride
Alcohols, C13-C15 branched and linear, ethoxylated

Hazard statements

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H411 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 carefully and follow all instructions.
P260 Do not breathe mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

(Contd. on page 2)

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according to 1907/2006/EC, Article 31

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Version number 4 (replaces version 3)

Revision: 21.11.2023

Trade name: Algae and Mildew Remover Longlife

(Contd. of page 1)

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 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.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P405 Store locked up.
 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.

· Determination of endocrine-disrupting properties

For information on endocrine disrupting properties see section 11.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 68424-85-1 EC number: 939-253-5 Reg.nr.: 01-2119965180-41-xxxx	Quarternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chloride Skin Corr. 1B, H314; Eye Dam. 1, H318 Aquatic Chronic 1, H410 (M=1) Acute Tox. 4, H302	12.5-25%
CAS: 157627-86-6 EC number: 935-523-1 Reg.nr.: 02-2119548515-35-0000	Alcohols, C13-C15 branched and linear, ethoxylated Eye Dam. 1, H318 Acute Tox. 4, H302 Aquatic Chronic 3, H412	1-5%

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

preservation agents (Quarternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chloride)	≥15 - <30%
non-ionic surfactants	<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 information: Take affected persons out into the fresh air.
Position and transport stably in side position.
Immediately remove any clothing soiled by the product.

· After inhalation: 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.
Immediately rinse with water.

· After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing: 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.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 4 (replaces version 3)

Revision: 21.11.2023

Trade name: Algae and Mildew Remover Longlife

(Contd. of page 2)

· **4.3 Indication of any immediate medical attention and special treatment needed**

If swallowed, gastric irrigation with added, activated carbon.

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**

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

In case of fire, the following can be released:

Nitrogen oxides (NO_x)

Hydrogen cyanide (HCN)

Carbon monoxide (CO)

· **5.3 Advice for firefighters**· Protective equipment:

Do not inhale explosion gases or combustion gases.

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

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

Ensure adequate ventilation

Use respiratory protective device against the effects of fumes/dust/aerosol.

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 section 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.

Avoid splashes or spray in enclosed areas.

Ensure good ventilation/exhaustion at the workplace.

· Information about fire - and explosion protection:

No special measures required.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.11.2023

Version number 4 (replaces version 3)

Revision: 21.11.2023

Trade name: Algae and Mildew Remover Longlife

(Contd. of page 3)

· **7.2 Conditions for safe storage, including any incompatibilities**

- Storage:
- Requirements to be met by storerooms and receptacles: Prevent any seepage into the ground.
- Information about storage in one common storage facility: Store away from oxidising agents.
Store away from foodstuffs.
- Further information about storage conditions: Keep container tightly sealed.
- Storage class: 8 A
- **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: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs

68424-85-1 Quarternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chloride

Oral	DNEL (Langzeit-wiederholt)	3.4 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	5.7 mg/kg bw/day (ARB)
		3.4 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	3.96 mg/m ³ Air (ARB)
		1.64 mg/m ³ Air (BEV)

· PNECs

68424-85-1 Quarternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chloride

PNEC (wässrig)	0.4 mg/l (KA)
	0.00096 mg/l (MW)
	0.0009 mg/l (SW)
	0.00016 mg/l (WAS)
PNEC (fest)	7 mg/kg Trockengew (BO)
	13.09 mg/kg Trockengew (MWS)
	12.27 mg/kg Trockengew (SWS)

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

· **8.2 Exposure controls**

- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:
 - Do not eat, drink, smoke or sniff while working.
 - Use skin protection cream for skin protection.
 - Clean skin thoroughly immediately after handling the product.
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing
 - Wash hands before breaks and at the end of work.
 - Do not inhale gases / fumes / aerosols.
 - Avoid contact with the eyes and skin.
- Respiratory protection: Use suitable respiratory protective device only when aerosol or mist is formed. In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.11.2023

Version number 4 (replaces version 3)

Revision: 21.11.2023

Trade name: Algae and Mildew Remover Longlife

(Contd. of page 4)

· Hand protection

Preventive skin protection by use of skin-protecting agents is recommended.
 After use of gloves apply skin-cleaning agents and skin cosmetics.
 Skin protection agent recommendation for preventive skin shelter without use of protective gloves:
 STOKODERM (<http://www.stoko.com>)
 Skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:
 STOKO EMULSION (<http://www.stoko.com>)
 Skin protection recommendation for skin cleaning after product handling:
 FRAPANTOL (<http://www.stoko.com>)
 Skin protection agent recommendation for skin aftercare:
 STOKO VITAN (<http://www.stoko.com>)
 The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory analyses of the company KCL GmbH in compliance with EN374.
 This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: <http://www.kcl.de>).



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

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. 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

Value for the permeation: Level ≤ 6 , 480 min
 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 gloves made of the following materials are suitable:

Butyl rubber, BR
 Butoject (KCL, Art_No. 897, 898)
 Nitrile rubber, NBR
 Camatril (KCL, Art_No. 730, 731, 732, 733)

· As protection from splashes gloves made of the following materials are suitable:

Butyl rubber, BR
 Butoject (KCL, Art_No. 897, 898)
 Nitrile rubber, NBR
 Camatril (KCL, 730, 731, 732, 733)

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.11.2023

Version number 4 (replaces version 3)

Revision: 21.11.2023

Trade name: Algae and Mildew Remover Longlife

(Contd. of page 5)

· Not suitable are gloves made of the following materials:

Leather gloves
Strong material gloves

· Eye/face protection



Tightly sealed goggles

· Body protection:

Protective work clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· <u>Colour:</u>	Colourless
· <u>Odour:</u>	Characteristic
· <u>Melting point/freezing point:</u>	Undetermined.
· <u>Boiling point or initial boiling point and boiling range</u>	100 °C
· <u>Flash point:</u>	200 °C
· <u>pH at 20 °C</u>	7
· <u>Viscosity:</u>	
· <u>Kinematic viscosity at 20 °C</u>	11 s (DIN 53211/4)
· <u>Dynamic:</u>	Not determined.
· <u>Solubility</u>	
· <u>water:</u>	Fully miscible.
· <u>Vapour pressure at 20 °C:</u>	23 hPa
· <u>Density and/or relative density</u>	
· <u>Density at 20 °C:</u>	1 g/cm ³

· 9.2 Other information

· <u>Appearance:</u>	
· <u>Form:</u>	Fluid
· <u>Important information on protection of health and environment, and on safety.</u>	
· <u>Ignition temperature:</u>	Product is not selfigniting.
· <u>Explosive properties:</u>	Product does not present an explosion hazard.
· <u>Solvent content:</u>	
· <u>Water:</u>	76.0 %
· <u>Solids content:</u>	25.0 %

· Information with regard to physical hazard classes

· <u>Explosives</u>	Void
· <u>Flammable gases</u>	Void
· <u>Aerosols</u>	Void
· <u>Oxidising gases</u>	Void
· <u>Gases under pressure</u>	Void
· <u>Flammable liquids</u>	Void
· <u>Flammable solids</u>	Void
· <u>Self-reactive substances and mixtures</u>	Void
· <u>Pyrophoric liquids</u>	Void
· <u>Pyrophoric solids</u>	Void
· <u>Self-heating substances and mixtures</u>	Void
· <u>Substances and mixtures, which emit flammable gases in contact with water</u>	Void
· <u>Oxidising liquids</u>	Void
· <u>Oxidising solids</u>	Void
· <u>Organic peroxides</u>	Void
· <u>Corrosive to metals</u>	Void

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.11.2023

Version number 4 (replaces version 3)

Revision: 21.11.2023

Trade name: Algae and Mildew Remover Longlife

(Contd. of page 6)

· 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 and stored according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with strong oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Carbon monoxide
Ammonia
Nitrogen oxides (NOx)
Possible in traces.

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 relevant for classification:**ATE (Acute Toxicity Estimates)**

Oral	LD50	>1,399-1,663 mg/kg (rat)
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68424-85-1 Quarternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chloride

Oral	LD50	344 mg/kg (rat)
Dermal	LD50	3,412 mg/kg (rabbit)

157627-86-6 Alcohols, C13-C15 branched and linear, ethoxylated

Oral	LD50	>300-2,000 mg/kg (rat) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)
	LC50/48h	1-10 mg/l (Oncorhynchus mykiss)

- 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 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.

11.2 Information on other hazards· Endocrine disrupting properties

None of the ingredients is listed.

(Contd. on page 8)

EU

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.11.2023

Version number 4 (replaces version 3)

Revision: 21.11.2023

Trade name: Algae and Mildew Remover Longlife

(Contd. of page 7)

SECTION 12: Ecological information**· 12.1 Toxicity**· Aquatic toxicity:**68424-85-1 Quarternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chloride**

EC50	7.75 mg/l (BES)
LC50	7,070 mg/l (Eisenia fetida (Regenwürmer))
EC50/48h	0.016 mg/l (daphnia magna)
ErC50/72h	0.049 mg/l (Pseudokirchneriella subcapitata)
NOEC	0.032 mg/l (Pimephales promelas)
NOEC/21d	0.0042 mg/l (daphnia magna)
LC50/96h	0.28 mg/l (Pimephales promelas)

157627-86-6 Alcohols, C13-C15 branched and linear, ethoxylated

EC50/48h	1-10 mg/l (daphnia magna)
EC10	>1,000 mg/l (BES)
EC50/72h	1-10 mg/l (Scenedesmus subspicatus)

· 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.

· 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· Additional ecological information:· General notes:

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

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.

· European waste catalogue

20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	separately collected fractions (except 15 01)
20 01 29*	detergents containing hazardous substances

· Uncleaned packaging:· Recommendation:

Disposal must be made according to official regulations.

· Recommended cleansing agents:

Water, if necessary together with cleansing agents.

SECTION 14: Transport information**· 14.1 UN number or ID number**· ADR, IMDG, IATA

UN1760

(Contd. on page 9)

EU

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.11.2023

Version number 4 (replaces version 3)

Revision: 21.11.2023

Trade name: Algae and Mildew Remover Longlife

(Contd. of page 8)

· 14.2 UN proper shipping name· ADR

1760 CORROSIVE LIQUID, N.O.S. (Quarternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chloride), ENVIRONMENTALLY HAZARDOUS

· IMDG, IATA

CORROSIVE LIQUID, N.O.S. (Quarternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chloride)

· 14.3 Transport hazard class(es)· ADR· Class

8 (C9) Corrosive substances.

· Label

8

· IMDG, IATA· Class

8 Corrosive substances.

· Label

8

· 14.4 Packing group· ADR, IMDG, IATA

II

· 14.5 Environmental hazards:· Marine pollutant:

Product contains environmentally hazardous substances:

No

· Special marking (ADR):

Symbol (fish and tree)

· 14.6 Special precautions for user· Hazard identification number (Kemler code):

Warning: Corrosive substances.

80

· EMS Number:

F-A,S-B

· Stowage Category

B

· Stowage Code

SW2 Clear of living quarters.

· 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

· Transport/Additional information:

Not dangerous according to the above specifications.

· ADR· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· Transport category

2

· Tunnel restriction code

E

· IMDG· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation":

UN 1760 CORROSIVE LIQUID, N.O.S. (QUARTERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDE), 8, II, ENVIRONMENTALLY

(Contd. on page 10)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.11.2023

Version number 4 (replaces version 3)

Revision: 21.11.2023

Trade name: Algae and Mildew Remover Longlife

(Contd. of page 10)

<ul style="list-style-type: none"> · <u>Date of previous version:</u> · <u>Version number of previous version:</u> · <u>Abbreviations and acronyms:</u> 	<p>17.03.2022</p> <p>3</p> <p>RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)</p> <p>ICAO: International Civil Aviation Organisation</p> <p>ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)</p> <p>IMDG: International Maritime Code for Dangerous Goods</p> <p>IATA: International Air Transport Association</p> <p>GHS: Globally Harmonised System of Classification and Labelling of Chemicals</p> <p>EINECS: European Inventory of Existing Commercial Chemical Substances</p> <p>ELINCS: European List of Notified Chemical Substances</p> <p>CAS: Chemical Abstracts Service (division of the American Chemical Society)</p> <p>DNEL: Derived No-Effect Level (REACH)</p> <p>PNEC: Predicted No-Effect Concentration (REACH)</p> <p>LC50: Lethal concentration, 50 percent</p> <p>LD50: Lethal dose, 50 percent</p> <p>PBT: Persistent, Bioaccumulative and Toxic</p> <p>SVHC: Substances of Very High Concern</p> <p>vPvB: very Persistent and very Bioaccumulative</p> <p>ATE: Acute toxicity estimate values</p> <p>Acute Tox. 4: Acute toxicity – Category 4</p> <p>Skin Corr. 1B: Skin corrosion/irritation – Category 1B</p> <p>Eye Dam. 1: Serious eye damage/eye irritation – Category 1</p> <p>Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1</p> <p>Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2</p> <p>Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3</p>
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