

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.05.2020

Version number 7

Revision: 12.05.2020

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

1.1 Product identifier

Trade name **EPOXY FAS 100, KOMP. B**

Article number: 0916

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category PC9a Coatings and paints, thinners, paint removers

Process category

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC10 Roller application or brushing

Environmental release category

ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

ERC8c Widespread use leading to inclusion into/onto article (indoor)

ERC11a Widespread use of articles with low release (indoor)

Application of the substance / the mixture Coating

Uses advised against No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Remmers GmbH

Postfach 1255

D-49624 Lönigen / Germany

Tel.: +49(0)5432/83-0

Fax: +49(0)5432/3985

Information department:

Product Safety department: Tel.: Steve Dunn Tel.: +44 (0) 1293 594 010

E-Mail: sales@remmers.co.uk

Remmers (UK) Limited
Unit B1 The Fleming Centre
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fon +44 (0) 1293 594 010
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1.4 Emergency telephone number:

during working hours:

U.K.: Tel.: +44 (0) 1293 594 010

sales@remmers.co.uk

Head Office Germany: Tel.: +49 (0)5432 83 187

info@remmers.de

after working hours: Tel.: +49 (0)171 21 34 091

24h-Transport Emergency Contact Phone Number:

within USA and Canada: 1-800-424-9300

outside USA and Canada: 001-703-527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H332 Harmful if inhaled.

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.05.2020

Version number 7

Revision: 12.05.2020

Trade name **EPOXY FAS 100, KOMP. B**

(Contd. of page 1)

Skin Sens. 1 H317 May cause an allergic skin reaction.
 Repr. 2 H361f Suspected of damaging fertility.
 Aquatic Chronic 2 H411 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 CLP regulation.

Hazard pictograms

GHS05 GHS07 GHS08 GHS09

Signal word Danger**Hazard-determining components of labelling:**

benzyl alcohol
 fatty acids C18 unsat, reaction products with triethylenetetramine
 4-tert-butylphenol
 m-phenylenebis(methylamine)
 3-aminomethyl-3,5,5-trimethylcyclohexylamine
 2,4,6-tris(dimethylaminomethyl)phenol
 3-aminopropyldimethylamine
 trimethylhexane-1,6-diamine
 N-(3-(trimethoxysilyl)propyl)ethylenediamine

Hazard statements

H332 Harmful if inhaled.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H361f Suspected of damaging fertility.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dusts or mists.
 P273 Avoid release to the environment.
 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.
 P310 Immediately call a POISON CENTER/doctor.
 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.**SECTION 3: Composition/information on ingredients****3.2 Chemical characterisation: Mixtures****Description:** Epoxy resin hardener, formulation based on aliphatic polyamines

Dangerous components [% w/w]:		
CAS: 100-51-6 EINECS: 202-859-9 Index number: 603-057-00-5 Reg.nr.: 01-2119492630-38-XXXX	benzyl alcohol ----- Acute Tox. 4, H302; Acute Tox. 4, H332	≥20-<40%
CAS: 1226892-44-9 EC number: 629-765-4	fatty acids C18 unsat, reaction products with triethylenetetramine ----- Skin Corr. 1A, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317	≥10-<20%

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.05.2020

Version number 7

Revision: 12.05.2020

Trade name **EPOXY FAS 100, KOMP. B**

(Contd. of page 2)

	Polyaminoamidaddukt Eye Irrit. 2, H319	≥10-<20%
CAS: 1477-55-0 EINECS: 216-032-5 Reg.nr.: 01-2119480150-50-XXXX	m-phenylenebis(methylamine) Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Sens. 1, H317; Aquatic Chronic 3, H412	≥5-<10%
CAS: 2855-13-2 EINECS: 220-666-8 Index number: 612-067-00-9 Reg.nr.: 01-2119514687-32-XXXX	3-aminomethyl-3,5,5-trimethylcyclohexylamine Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	≥5-<10%
CAS: 98-54-4 EINECS: 202-679-0 Reg.nr.: 01-2119489419-21-XXXX	4-tert-butylphenol Repr. 2, H361f; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315	≥3-<5%
CAS: 90-72-2 EINECS: 202-013-9 Index number: 603-069-00-0 Reg.nr.: 01-2119560597-27-XXXX	2,4,6-tris(dimethylaminomethyl)phenol Skin Corr. 1B, H314; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412	≥2.5-<5%
CAS: 109-55-7 EINECS: 203-680-9 Index number: 612-061-00-6	3-aminopropyl dimethylamine Flam. Liq. 3, H226; Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	≥2.5-<5%
CAS: 25620-58-0 EINECS: 247-134-8	trimethylhexane-1,6-diamine Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1, H317	≥1-<2.5%
CAS: 1760-24-3 EINECS: 217-164-6	N-(3-(trimethoxysilyl)propyl)ethylenediamine Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1, H317	≥0.1-<1%

SVHC

CAS: 98-54-4 | 4-tert-butylphenol

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 the open air and position comfortably

In case of respiratory tract or mucous membrane irritation (e.g. tussive irritation), if you feel unwell or prolonged exposure, seek medical attention.

Supply fresh air and call for doctor for safety reasons.

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

After skin contact

If skin irritation continues, consult a doctor.

Wash immediately with water and soap and rinse thoroughly.

After eye contact Rinse opened eye for several minutes under running water. Then consult doctor.**After swallowing**

Call a doctor immediately.

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

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

In case of prolonged/repeated exposure or in high concentrations:

Coughing

Dazed

Respiratory distressn (dyspnoea)

Gastro-intestinal symptoms

nausea

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.05.2020

Version number 7

Revision: 12.05.2020

Trade name **EPOXY FAS 100, KOMP. B**

(Contd. of page 3)

symptomatic treatment

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents Use fire fighting measures that suit the environment.

5.2 Special hazards arising from the substance or mixture

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

May be released in case of fire

Carbon monoxide (CO)

Carbon dioxide

carbon monoxides

Phenol

aromatic hydrocarbons

further harmful conflagration gases and fumes

5.3 Advice for firefighters

Protective equipment:

Wear self-contained breathing apparatus.

Wear full protective suit.

Put on breathing apparatus.

Additional information

Cool endangered containers with water spray jet.

Collect contaminated fire fighting water separately. It must not enter drains.

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

Ensure adequate ventilation

Put on breathing apparatus.

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Do not allow to enter the ground/soil.

Do not allow product to reach sewage system or water bodies.

Inform responsible authorities in case product reaches bodies of water or sewage system.

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 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

Use only in well ventilated areas.

Ensure good ventilation/exhaust in workplaces.

Avoid the formation of aerosols.

Information about protection against explosions and fires: Keep breathing equipment ready.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers:

Store only in unopened original containers.

Prevent any penetration into the ground.

Information on storage in a common storage facility:

Store away from oxidising agents.

Store away from food.

Further information about storage conditions:

Store container in a well ventilated position.

Protect from frost.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.05.2020

Version number 7

Revision: 12.05.2020

Trade name **EPOXY FAS 100, KOMP. B**

(Contd. of page 4)

Keep container tightly closed.

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 limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with limit values that have to be monitored at the workplace.

Additional information: The lists that were valid during compilation were used as a basis.**8.2 Exposure controls****Personal protective equipment****General protective and hygienic measures**

Do not eat, drink or smoke while working.

Use skin protection cream for preventive skin protection.

Keep away from food, beverages and animal feed.

Immediately remove soiled, saturated clothing.

Wash hands before pauses and after work.

Avoid contact with eyes and skin.

Respiratory equipment:

Filter A/P2.

Only use ambient air independent respiratory equipment in pits, shafts and silos!

In case of brief exposure or low pollution load, use respiratory protection equipment with filter. In case of intensive or longer exposure, use self-contained respiratory protection equipment.

Protection of hands:

Long cuffed gloves

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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

Material of gloves

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

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

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

Eye protection: Tightly sealed 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:	Clear
Odour:	Amine-like
Odour threshold:	Not determined.

pH-value: Not determined.**Change in condition**

Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	205 °C

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.05.2020

Version number 7

Revision: 12.05.2020

Trade name **EPOXY FAS 100, KOMP. B**

(Contd. of page 5)

Flash point:	> 100 °C (Setaflash)
Inflammability (solid, gaseous)	Not applicable.
Ignition temperature:	not applicable
Decomposition temperature:	Not determined.
Self-inflammability:	Product is not self-igniting.
Explosive properties:	Product is not explosive.
Explosive Limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not determined.
Density at 20 °C:	0.97 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix
Distribution coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic at 20 °C:	750 mPas
kinematic:	Not determined.
Solvent separation test	< 3 %
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 handled and stored 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.

10.6 Hazardous decomposition products:

None if used properly.

None if stored properly.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

Harmful if inhaled.

LD/LC50 values that are relevant for classification:

CAS: 100-51-6 benzyl alcohol

Oral	LD50	1,230 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rabbit)

CAS: 1477-55-0 m-phenylenebis(methylamine)

Oral	LD50	1,040 mg/kg (rat)
Inhalative	LC50/4 h	2.4 mg/l (rat)

CAS: 2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Oral	LD50	1,030 mg/kg (rat)
Dermal	LD50	1,840 mg/kg (rabbit)

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.05.2020

Version number 7

Revision: 12.05.2020

Trade name **EPOXY FAS 100, KOMP. B**

(Contd. of page 6)

CAS: 98-54-4 4-tert-butylphenol		
Oral	LD50	2,951 mg/kg (rat)
Dermal	LD50	2,288 mg/kg (rabbit)
CAS: 109-55-7 3-aminopropyldimethylamine		
Oral	LD50	1,870 mg/kg (rat)
Dermal	LD50	490 mg/kg (rabbit)
CAS: 25620-58-0 trimethylhexane-1,6-diamine		
Oral	LD50	910 mg/kg (rat)

Skin corrosion/irritation:

Causes severe skin burns and eye damage.

Serious eye damage/irritation:

Causes serious eye damage.

Sensitisation:

May cause an allergic skin reaction.

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:**

Suspected of damaging fertility.

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:** No further relevant information available.**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.**Ecotoxicological effects:****Remark:** Toxic for fish**Additional ecological information:****General notes:**

Do not allow undiluted or non-neutralised product to reach the sewage system or receiving waters.

Also toxic for fish and plankton in bodies of water.

Toxic for aquatic organisms

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

Hazardous to drinking water even if small quantities leak into soil.

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****Recommendation**

Not hardened material must be disposed of as hazardous waste according to official regulations.

Hardened product remains may be disposed of as building rubble or put into household garbage.

The given refuse codes are recommendations based upon the intended use of the product. Because of special use and disposal conditions at the user's, other codes may apply under other conditions.

European waste catalogue	
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

Uncleaned packaging:**Recommendation:** Disposal must be made according to official regulations.

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31






Printing date 12.05.2020

Version number 7

Revision: 12.05.2020

Trade name **EPOXY FAS 100, KOMP. B**

(Contd. of page 7)

SECTION 14: Transport information	
14.1 UN-Number ADR, IMDG, IATA	UN1760
14.2 UN proper shipping name ADR	1760 CORROSIVE LIQUID, N.O.S. (m-phenylenebis(methylamine)), ENVIRONMENTALLY HAZARDOUS
IMDG	CORROSIVE LIQUID, N.O.S. (m-phenylenebis(methylamine)), MARINE POLLUTANT
IATA	CORROSIVE LIQUID, N.O.S. (m-phenylenebis(methylamine))
14.3 Transport hazard class(es)	
ADR	
 	
Class	8 (C9) Corrosive substances.
Label	8
<hr style="border-top: 1px dashed black;"/>	
IMDG	
 	
Class	8 Corrosive substances.
Label	8
<hr style="border-top: 1px dashed black;"/>	
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 hazard identification number: EMS Number: Segregation groups Stowage Category Stowage Code	Warning: Corrosive substances. 80 F-A,S-B Alkalis A SW2 Clear of living quarters.
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

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.05.2020

Version number 7

Revision: 12.05.2020

Trade name **EPOXY FAS 100, KOMP. B**

(Contd. of page 8)

Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
Transport category	3
Tunnel restriction code	E
UN "Model Regulation":	UN 1760 CORROSIVE LIQUID, N.O.S. (M-PHENYLENEBIS(METHYLAMINE)), 8, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Directive 2012/18/EU

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

Seveso category E2 Hazardous to the Aquatic Environment

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

Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

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

National regulations

Other regulations, limitations and prohibition ordinances

APME document: "Epoxy resins and curing agents: Toxicology, working safety, environment."

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

CAS: 98-54-4	4-tert-butylphenol
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15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Delivery specifications are found in the respective Technical Information Sheets.

This data is based on our present state of knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship.

Relevant phrases

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H361f Suspected of damaging fertility.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

Classification according to Regulation (EC) No 1272/2008 Calculation method

Department issuing data specification sheet: Product Safety department / EHS

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity - oral – Category 4

(Contd. on page 10)

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

Printing date 12.05.2020

Version number 7

Revision: 12.05.2020

Trade name EPOXY FAS 100, KOMP. B

(Contd. of page 9)

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

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

Skin Sens. 1: Skin sensitisation – Category 1

Repr. 2: Reproductive toxicity – 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

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