TAR & RESIN REMOVER SPRAY

SECTION 1. MIXTURE IDENTIFICATION AND MANUFACTURER/SUPPLIER IDENTIFICATION

1.1. Product identification:
TAR & RESIN REMOVER SPRAY
UFI: S9P0-G04A-1002-VV8H

1.2. Relevant identified uses of the substance or mixture and uses advised against
Cold cleaning agent.

1.3. Data of the safety data sheet supplier

Przedsiębiorstwo RANAL Sp. z o.o.
Ul. Łódzka 3
42-240 Rudniki, PL

Tel.: +48 34 329 45 03
Fax: +48 34 320 12 16
Registration number 000029202

Person responsible for the safety data sheet: ranal@ranal.pl

1.4. Emergency telephone
+ 48 34 329 45 03 (8:00 -15:00)

SEKCJA 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
Classification according to The EC Regulation 1272/2008 of 16 December 2008 on classification, labelling and packaging (CLP).


GHS02 flame

Aerosol 1	H222-H229 Extremely flammable aerosol. Pressurized container: may burst if heated.


GHS08 health hazard

STOT RE 2	H373 May cause damage to organs through prolonged or repeated exposure.


GHS09 environment

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


GHS07

Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes eye irritation.
STOT SE 3	H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
Asp. Tox. 1	H304 May be fatal if swallowed and enters airways.

2.2. Label elements

Classification according to the regulation (EC) no 1272/2008:
The product has been classified and labelled according to CLP regulation.

Hazard pictograms:


GHS02 GHS08 GHS09 GHS07

Signal word: **Danger**.

Components indicating hazard for labelling:
Product of reaction mass of ethylbenzene and xylene.
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics.

Hazard statement:

H222-H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
H315	Causes skin irritation.
H319	Causes eye irritation.
H335-H336	May cause respiratory irritation. May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
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.

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Pressurized container – Do not pierce or burn, even after use.
P260	Do not breathe mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection.
P302+P352	IF ON SKIN: Wash skin with plenty of water and soap.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501	Dispose of contents/container in accordance with local / regional / national / international regulations.

Additional information:
Formation of explosive mixtures is possible in case of insufficient ventilation.

2.3. Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SEKCJA 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances
Not applicable.

3.2. Mixtures
Mixture of biocatalysts with liquid propellant.

Hazardous components	Classification	H phrases	% weight
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	CAS: 68920-06-9 EC number: 920-750-0 Reg. no: 01-2119473851-33	Flam. Liq. 2, H225; Asp. Tox. 1; H304; Aquatic Chronic 2, H411; STOT SE 3, H336, EUH066	25-<50
Product of reaction mass of ethylbenzene and xylene	EC number: 905-588-0 Reg. no: 01-2119488216-32 01-2119486136-34	Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304, Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	25-<50
Propane	CAS: 74-98-6 EINECS: 200-827-9 Reg. no: 01-2119486944-21	Flam. Gas 1A, H220; Press. Gas (Comp.), H280.	2.5-<10
Butane (1,3 Butadiene <0.1%)	CAS: 106-97-8 EINECS: 203-448-7 Reg. no: 01-2119474691-32	Flam. Gas 1A, H220; Press. Gas (Comp.), H280.	1-<2.5
Isobutane	CAS: 75-28-5 EINECS: 200-857-2 Reg. no: 01-2119485395-27	Flam. Gas 1A, H220; Press. Gas (Comp.), H280.	0.1-<1

Directive (EC) No. 648/2004 on detergents / Content labelling:
Aliphatic hydrocarbons, aromatic hydrocarbons ≥30%

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information:
Symptoms of poisoning may not occur until several hours later, therefore medical supervision is necessary for at least 48 hours after the accident.

After inhalation: Provide fresh air, possibly artificial respiration, warmth. If symptoms persist, consult a doctor. In case of loss of consciousness place and transport in stable recovery position.
After contact with skin: Immediately wash with water and soap and rinse thoroughly.
After contact with eyes: Rinse opened eye for several minutes under running water.
After swallowing: Do not induce vomiting and call a doctor.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant data available.

4.3. Indications of any immediate medical attention and special treatment needed
No further relevant data available.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media
Useful extinguishing media: water mist, carbon dioxide, extinguishing powders, foam resistant to alcohol.
Unsuitable extinguishing media: full jet of water.

5.2. Special hazards arising from the substance or mixture
No further relevant data available.

5.3. Advice for fire fighters
Special protective equipment: Wear respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency measures
Wear protective clothing. Move unprotected persons to a safe place.

6.2. Environmental precautions
Prevent from reaching sewage system or water courses. In the event of leakage into water course or sewage system inform competent authorities. Do not allow entering sewage system /surface water /ground water.

6.3. Methods and materials for containment and cleaning up
Dispose of contaminated material as waste according to section 13.
Ensure adequate ventilation.
Do not wash with water or water based cleaning agents.

6.4. Reference to other sections
Information on safe handling see section 7.
Information on personal protective measures see section 8.
Information on disposal see section 13.

SECTION 7: HANDLING AND STORAGE OF SUBSTANCES AND MIXTURES

7.1. Precautions for safe handling
Ensure good ventilation / exhaustion at the workplace.

Information about fire and explosion protection:
Do not spray towards flames or over glowing material. Keep ignition sources away - do not smoke. Take precautionary measures against static discharges.
Warning: Pressurized container. Protect from sunlight and temperatures above 50°C. Do not open violently and do not burn even after use.

7.2. Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:
Keep cool.
Observe regulations concerning the storage of pressurized gas tanks.

Information about common storage:
Observe regulations concerning the storage of pressurized gas tanks.

Further information about storage conditions:
Store in well-sealed barrels in a cool and dry place. Protect against heat and direct sunlight.

7.3. Special end uses
No further relevant data available.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION MEASURES

Recommendations regarding technical measures:
Provide good ventilation in the workplace.

8.1. Control parameters

Components with limit values that require monitoring depending on the workplace:

74-98-6 Propane

MPC	MPC:	1800 mg/m3

106-97-8 Butane (1,3 Butadiene <0,1%)

MPC	MPIC:	3000 mg/m3
	MPC:	1900 mg/m3

75-28-5 Isobutane

TLV	MPC:	1900 mg/ m3, 800 ppm
	Additioneel ingevuld obv klant voor Hfdst 3 SDS	

DNEL values:

68920- 06-9 Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Oral	DNEL Long term-systemic	699 mg/kg bw/day (Consumer)
Skin	DNEL Long term-systemic	699 mg/kg bw/day (Consumer)
		773 mg/kg bw/day (Worker)

Inhalation	DNEL Long term-systemic	608 mg/ m3 (Consumer) 2035 mg/m3 (Worker)

Product of reaction mass of ethylbenzene and xylene

Oral	DNEL Long term-systemic	1.6 mg/kg bw/day (Consumer)
Skin	DNEL Long term-systemic	108 mg/kg bw/day (Consumer) 180 mg/kg bw/day (Worker)
inhalation	DNEL Acute-local	289 mg/m^3 (worker)
	DNEL Long term-systemic	14.8 mg/m^3 (Consumer) 77 mg/m^3 (Worker)

PNEC values:

Product of reaction mass of ethylbenzene and xylene

PNEC Fresh water	0.327 mg/l (Undefined)
PNEC Marine water	0.327 mg/l (Undefined)
PNEC Fresh water sediment	12.46 mg/l (dry weight) (Undefined)
PNEC Soil	2.31 mg/kg (Undefined)
PNEC Sewage treatment plant	6.58 mg/l (Undefined)
PNEC Marine water sediment	12.46 mg/l (dry weight) (Undefined)

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

8.2. Exposure control

Technical control measures:
No further data, see section 7.

Personal protective measures:
General measures of protection and hygiene:
Keep away from foodstuffs, beverages and feed. Immediately take off all soaked and contaminated clothing. Wash hands before each break and at the end of work. Do not breathe gases/ vapours / spray. Avoid contact with eyes. Avoid contact with eyes and skin. General ventilation.

Respiratory protection:
In case of insufficient ventilation use respiratory protection.
Filter A2/P2.

Hands protection:
Use protective gloves to work with chemicals according to standard EN 374.


Protective gloves.
Gloves resistant to solvents.
Selection of the glove material on consideration of the breakthrough times, rates of diffusion and 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 mixture consisting of several substances the resistance of the materials from which the gloves are made cannot be calculated in advance and should therefore be checked before use.
Nitrile rubber.
Recommended thickness of the material: ≥0.5 mm

Penetration time of the glove material:
For continuous contact, it is recommended to use gloves with a tensile strength of not less than 240 minutes, with a penetration time of more than 480 minutes as priority. We recommend the same for short-term works or protection against splash. We understand that gloves that offer this level of protection may not be in stock. In this case, a shorter breakthrough time is acceptable in the procedures governing maintenance and as long as the timely replacements are respected. Thickness of the gloves is not a good measure of their resistance to chemicals as it depends on the exact composition of the glove material.
Information about the penetration time of the substance should be obtained from the glove manufacturer and has to be observed.

Eye or face protection:
Protective glasses (EN-166).
Tightly sealed protective glasses.

Body protection:
Use protective clothing (EN-13034/6).
It is recommended to use antistatic, chemical and oil-resistant clothing as well as safety shoes. (EN1149; EN340&EN ISO 13688; 13034-6).

Environmental control
Use an appropriate container to prevent environmental contamination.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	according to product name

Odour:	Characteristic
Odour threshold:	Not specified.
Melting /freezing point:	Not specified.
Boiling point or initial boiling point and boiling range:	-44.5°C
Flammability of materials:	Not applicable.
Bottom and top explosion limit:	
Bottom:	0.7 Vol %
Top:	10.9 Vol %
Flash point:	-97°C
Ignition temperature:	>200°C
pH	Mixture is non-polar/aprotic.
Viscosity:	
Kinematic viscosity:	≤ 20.5 mm^2/s, 40°C (L)
Dynamic:	Undetermined.
Solubility:	
Water:	Not miscible or difficult to mix.
n-octanol/water partition coefficient (log value):	Not specified.
Vapour pressure at 20 °C:	8300 hPa
Density or relative density:	
Density at 20°C:	0.746 g/cm^3
Relative density	Not specified.
Vapour density	Not specified.

9.2. Other information

Appearance:	
Form:	Aerosol
Important information on health and environment protection and safety	
Auto ignition point:	The product is not self-igniting.
Explosive properties:	The product is not explosive, but may form explosive mixtures with the air
Solvent content:	
Organic solvents:	100.0%.
Change of state:	
Evaporation rate:	Not applicable.
Information on the physical hazard classes:	
Explosives:	Void
Flammable gases:	Void
Aerosols:	Extremely flammable aerosol. Pressurized container: May burst if heated.
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
Oxidizing 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 data available.

10.2. Chemical stability

Thermal decomposition / conditions to be avoided:
No decomposition if used as intended.

10.3. Possibility of hazardous reactions
Hazardous reactions unknown.

10.4. Conditions to be avoided
No further relevant data available.

10.5. Incompatible materials
No further relevant data available.

10.6. Hazardous decomposition products
Hazardous decomposition products unknown.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:
Based on available data, the classification criteria are not met.

Relevant classified LD/LC50 values:

68920- 06-9 Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics		
Oral	LD50	> 5000 mg/kg (Rat)
Dermal	LD50	> 2800 mg/kg (Rabbit)
Inhalation	LC50(4h)	> 23 mg/l (Rat)
Product of reaction mass of ethylbenzene and xylene		
Oral	LD50	3523 mg/kg (Rat)
Dermal	LD50	12126 mg/kg (Rabbit)
Inhalation	LC50(4h)	27.124 mg/l (Rat)

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Causes eye irritation.
Allergic effect on airways or skin: Based on available data, the classification criteria are not met.
Mutagenic effect on germ cells: Based on available data, the classification criteria are not met.
Carcinogenic effect: May cause cancer.
Harmful effect on reproduction: Based on available data, the classification criteria are not met.
Specific target organ toxicity – single exposure: May cause respiratory irritation. May cause drowsiness or dizziness.
Specific target organ toxicity – repeated exposure: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard: May be fatal if swallowed and enters airways.

11.2 Information on other hazards

Endocrine disrupting properties:
None of the components is listed.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic toxicity:

68920- 06-9 Hydrocarbons, C7-C9, n-alkanes, isoalkanes,cyclics	
NOELR (72h)	10 mg/l (Pseudokirchneriella subcapitata)
EL50 (48h)	3 mg/l (Daphnia magna)
EL50 (72h)	10-30 mg/l (Pseudokirchneriella subcapitata)
LL50 (96h)	>13.4 mg/l (Oncorhynchus mykiss)
NOEC (21 days)	0.17 mg/l (Daphnia magna)
LOEC (21 days)	0.32 mg/l (Daphnia magna)
Product of reaction mass of ethylbenzene and xylene	
NOEC	1.3 mg/l (fish)
NOEC (7 days)	0.96 mg/l (Daphnia magna)
NOEC (72h)	0.44 mg/l (Algae)
NOEC (28 days)	16 mg/l (Daphnia magna)
LC50 (96h)	8.9-16.4 mg/l (Pimephales promelas)
EC50 (48h)	3.2-9.5 mg/l (Daphnia magna)

12.2. Persistence and degradability
Easily biodegradable.
Not easily biodegradable.

12.3. Bioaccumulative potential
No further relevant data available.

12.4. Mobility in soil
No further relevant data 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 hazardous effects
Warning: Poisonous to fish.

Further ecological information:
General information:
Water hazard class 2 (Self-assessment): hazardous to water.
Do not allow the product to reach ground water, surface water or sewage system.
Dangerous to drinking water if even small quantities leak into the ground.
Poisonous to fish and plankton in water reservoirs.
Poisonous to aquatic life.

SEKCJA 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Recommendation:
Must not be disposed together with household garbage. Prevent from reaching sewage system.

European waste catalogue:

08 02 99	Wastes not otherwise specified.
HP3	Flammable.
HP4	Irritating - causing skin irritation and eye damage.
HP5	Specific Target Organ Toxicity (STOT) or aspiration hazard.
HP6	Acute toxicity.
HP14	Ecotoxic.

Contaminated packaging:
Recommendation: Dispose of according to applicable regulations.

SECTION 14: TRANSPORT INFORMATION

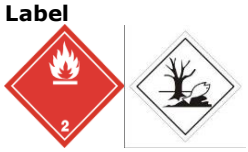
14.1. UN number:
ADR, ADN, IMDG, IATA UN1950

14.2. Proper shipping name

ADR, ADN	UN1950 AEROSOLS
IMDG	AEROSOLS
IATA	AEROSOLS, flammable

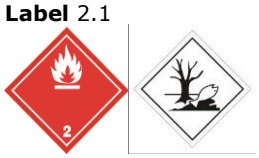
14.3. Class/ Classification code

ADR:
Class 2 5F gases
Label 2.1



ADN
Class ADN/R: 2 5F

IMDG:
Class 2.1 gases
Label 2.1



IATA:
Class 2.1 gases
Label 2.1

14.4. Packaging group
None.

14.5. Environmental hazards

The product contains substances hazardous to the environment:

Marine pollutants:	Yes. Symbol (fish and tree)
Special labelling (ADR):	Symbol (fish and tree)

14.6. Special precautions for users

Warning: gases.

Hazard identification number (Kemler code):	-
EMS Number:	F-D,S-U
Stowage Code:	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
Segregation Code:	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 Convention and the IBC Code

Not applicable.

Transport/ further information:

ADR:

Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
Tunnel restriction code	D

IMDG:

Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
UN "Model Regulation":	UN 1950 AEROSOLS, 2.1,

SECTION 15: REGULATORY INFORMATION

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

Directive 2012/18/EU
Indicated dangerous components- ANNEX I None of the components are listed.

Seveso category:
P3a FLAMMABLE AEROSOLS
E2 Hazardous to the aquatic environment.
Qualifying quantity (tonnes) for the application of lower-tier requirements: 150 t
Qualifying quantity (tonnes) for the application of upper-tier requirements: 500 t
Regulation (EC) no 1907/2006 ANNEX XVII Restriction conditions: 3.

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II: none of the components is listed.
Regulation (EU) 2019/1148, Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit for the purpose of licensing according to Article 5 item 3): None of the components are listed.
Annex II - REPORTABLE EXPLOSIVES PRECURSORS: None of the components are listed.
Regulation (EC) No. 273/2004 on drug precursors: none of the components are 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 components are listed.

National regulations:

· Employment Limitation Tips:

Class	**share %:**
NK	100.000
VOC-CH	100,00 %
VOC-EU	746,0 g/l
Danish MAL Code	5-3

15.2. Chemical safety assessment

Chemical safety assessment has not been performed.

SEKCJA 16: OTHER INFORMATION

This information is based on our present knowledge; however it does not definitively define the production characteristics and cannot be used as a justification for valid contracts.

Relative phrases:
H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long-lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

Classification according to the regulation (EC) no 1272/ 2008L:
PHYSICAL AND CHEMICAL PROPERTIES: The classification is based on the results of the mixtures tested. Health hazards, Environmental hazards: The method of classification of mixtures based on the constituents of the mixture (sum formula).

Explanation of abbreviations and acronyms:

RID:	Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail).
ICAO:	International Civil Aviation Organisation.
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).
MAL-Code:	Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labelling concerning inhalation hazards, Denmark
DNEL:	Derived No-Effect Level (REACH).
PNEC:	Derived 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.
Flam. Gas 1A:	Flammable Gases - Category 1A.
Aerosol 1:	Aerosols – Category 1.
Press. Gas (Comp.):	Gases under pressure - Compressed gas.
Flam. Liq. 2:	Flammable liquids – Category 2.
Flam. Liq. 3:	Flammable liquids – Category 3.
Acute Tox. 4:	Acute toxicity – Category 4.
Skin Irrit. 2:	Skin corrosion/irritation – Category 2.
Eye Irrit. 2:	Serious eye damage/eye irritation – Category 2.
STOT SE 3:	Specific target organ toxicity (single exposure) – Category 3.
STOT RE 2:	Specific target organ toxicity (repeated exposure) – Category 2.
Asp. Tox. 1:	Aspiration hazard – Category 1.
Aquatic Chronic 2:	Hazardous to the aquatic environment - long-term hazard to the aquatic environment – Category 2.