Safety data sheet
according to UK REACH

Printing date 02.07.2025 Version number 6.02 (replaces version 6.01) Revision: 31.10.2024

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

· 1.1 Product identifier

· **Trade name: 832FX-B**
· **Other Means of Identification:** Black Flexible Epoxy Encapsulating and Potting Compound (Part B)
· **Related Part Number:**
832FX-Part B, 832FX-450ML (B), 832FX-1.7L (B), 832FX-7.4L (B), 832FX-40L (B), 832FX-360L (B)
· **UFI:** EXF0-X0R7-J006-GHUN

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

· **Application of the substance / the mixture** Epoxy Hardener
· **Uses advised against** Not applicable

· 1.3 Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**

MG Chemicals Ltd. (Head Office)
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA
+(1) 905-331-1396
info@mgchemicals.com

MG Chemicals
Heame House, 23 Bliston Street
Sedgely Dudley DY3 1JA.
United Kingdom
+(44) 1663 362888

MG Chemicalst Ltd.
18-20, Msida Road,
Gzira, GZR 1401
MALTA

· **Further information obtainable from:** sds@mgchemicals.com

· 1.4 Emergency telephone number:

Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

3E (Access code: 335388)
+(44) 20 3514787
+(1) 760 476 3961
UK Toll free: +(0) 800 680 0425

* 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.
Skin Sens. 1	H317 May cause an allergic skin reaction.

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STOT RE 2	H373 May cause damage to the liver, the immune system and the gastro-intestinal tract through prolonged or repeated exposure.
Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

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

· **Hazard pictograms**

GHS05 GHS07 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components of labelling:**
polyoxypropylene diamine
Amines, coco alkyl
trimethylhexane-1,6-diamine

· **Hazard statements**
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H373 May cause damage to the liver, the immune system and the gastro-intestinal tract through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P102	Keep out of reach of children.
P260	Do not breathe fumes, mist or vapours.
P280	Wear protective gloves, protective clothing, and eye protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P501	Dispose of contents and container in accordance with local, regional, and national regulations.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Determination of endocrine-disrupting properties**		
61788-44-1	phenol, styrenated	List II

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SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

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

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· **Dangerous components:**		
CAS: 9046-10-0	polyoxypropylene diamine Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302	59%
CAS: 61788-44-1	phenol, styrenated Substance identified as having endocrine disrupting properties (II)	20%
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; Aquatic Chronic 3, H412	9%
CAS: 61788-46-3 EINECS: 262-977-1 Index number: 612-285-00-4	Amines, coco alkyl STOT RE 2, H373; Asp. Tox. 1, H304; Skin Corr. 1B, H314; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); Acute Tox. 4, H302; STOT SE 3, H335	9%
CAS: 90-72-2 EINECS: 202-013-9 Index number: 603-069-00-0	2,4,6-tris(dimethylaminomethyl)phenol Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	2%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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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:**
In case of unconsciousness place patient stably in side position for transportation.
Seek immediate medical advice.
Remove person to fresh air and keep comfortable for breathing.
If feeling unwell: Call a POISON CENTRE or doctor.

· **After skin contact:**
Take off immediately all contaminated clothing. Wash with plenty of water or shower.
Immediately call a POISON CENTRE or doctor.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice or attention.

· **After eye contact:**
Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Immediately call a POISON CENTER or doctor.

· **After swallowing:**
Rinse mouth.
Do NOT induce vomiting.
If symptoms persist consult doctor.

· **Information for doctor:**
In case of exposure to nitrogen oxides (NOx) combustion products vapors during a fire, the symptoms may be delayed. For significant exposures, the exposed person should be kept under medical surveillance for 48 hours.

· 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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**
During heating or in case of fire poisonous gases are produced.
Not flammable or combustible, but burns if involved in a fire. Produces irritating smoke of unknown toxicity in fires.
Prevent fire-fighting wash from entering waterway or sewer system.
· **Hazardous combustion products:**
Carbon Oxides (COx)
Nitrogen Oxides (NOx)

· **5.3 Advice for firefighters**
· **Protective equipment:** Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Do not breathe fumes, mist or vapors.

· **6.2 Environmental precautions:**
Avoid release to the environment.
Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**
Use neutralising agent.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Collect liquid in a sealable, chemical-resistant container.
Wash residue with a paper towel and place dirty towels in container.
Use soap and water to remove the last traces of residue.

· **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.

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SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Wear protective gloves and eye protection.
Wash hands and exposed skin thoroughly after handling.
Take off contaminated clothing and wash it before reuse.

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Collect spillage.
Contaminated work clothing should not be allowed out of the workplace.
Do not breathe mist, vapours, spray.

· **Information about fire - and explosion protection:** Keep respiratory protective device available.

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

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**
Keep in a dry and clean area, away from incompatible substances

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**
Keep container tightly sealed.
Store locked up.

· **Storage class:** 8 A

· **7.3 Specific end use(s)** See section 1.2

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.

· **Additional information:**
The lists valid during the making were used as basis.
Refer to the national or regional occupational exposure limit regulation for abbreviations and acronyms.

· **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:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.

· **Respiratory protection:**
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.
Advice should be sought from respiratory protection specialists.
If the product is heated or worker has a known allergic reaction, consider using a full mask with organic vapor cartridge or with an independent air supply.

· **Hand protection**
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Protective gloves: EN374

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

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· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye/face protection**

Safety glasses or tightly sealed goggles: EN 166

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SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **Physical state**	Liquid
· **Form:**	Viscous
· **Colour:**	Amber coloured
· **Odour:**	Ammonia-like
· **Odour threshold:**	Not determined.
· **Melting point/freezing point:**	Undetermined.
· **Boiling point or initial boiling point and boiling range**	>230 °C
· **Flammability**	Non flammable
· **Lower and upper explosion limit**	
· **Lower:**	Not applicable
· **Upper:**	Not applicable
· **Flash point:**	>104 °C
· **Auto-ignition temperature:**	Not determined
· **Decomposition temperature:**	Not determined.
· **pH**	Not determined.
· **Viscosity:**	
· **Kinematic viscosity**	Not determined.
· **Solubility**	
· **water:**	Not miscible or difficult to mix.
· **Partition coefficient n-octanol/water (log value)**	Not determined.
· **Vapour pressure:**	Not determined.
· **Relative density at 25 °C:**	0.98
· **Vapour density (air=1):**	Not determined.
· **Particle characteristics**	Not applicable.
· **9.2 Other information**	
· **9.2.1 Information with regard to physical hazard classes**	Not applicable
· **9.2.2 Other safety characteristics**	
· **Evaporation rate**	Not determined.
· **Ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.

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· **Solvent content:**	
· **Organic solvents:**	Not available
· **VOC (EC)**	0.00 %
· **Solids content:**	1.0 %

SECTION 10: Stability and reactivity

· **10.1 Reactivity** Reacts exothermically with epoxide groups.

· **10.2 Chemical stability** Chemically stable at normal temperatures and pressures.
· **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**
Avoid open flames, excessive heat, sparks, ignition sources, and incompatible substances.

· **10.5 Incompatible materials:**
Strong oxidizing agents
Strong acids

· **10.6 Hazardous decomposition products:**
No dangerous decomposition products known.
Hazardous combustion products: see section 5.

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	667 mg/kg

9046-10-0 polyoxypropylene diamine		
Oral	LD50	500 mg/kg (ATE)
25620-58-0 trimethylhexane-1,6-diamine		
Oral	LD50	900 mg/kg (rat)
61788-46-3 Amines, coco alkyl		
Oral	LD50	500 mg/kg (ATE)
90-72-2 2,4,6-tris(dimethylaminomethyl)phenol		
Oral	LD50	500 mg/kg (ATE)

· **Primary irritant effect:**
· **Skin corrosion/irritation** Causes severe skin burns and eye damage.
· **Serious eye damage/irritation** Causes serious eye damage.
· **Respiratory or skin 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** Based on available data, the classification criteria are not met.

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· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure**
May cause damage to the liver, the immune system and the gastro-intestinal tract through prolonged or repeated exposure.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

· **Summary of Effects and Symptoms by Routes of Exposure**
· **Eyes:**
eye damage, pain
redness, serious irritation
burns
· **Skin:**
chemical burns
blistering
redness, irritation
rash, allergic contact dermatitis
· **Inhalation:** irritation of the respiratory tract
· **Swallowed:**
irritation
abdominal pain
burning sensation
nausea, vomiting
· **Subacute to chronic toxicity:**
· **Delayed and immediate effects as well as chronic effects from short and long-term exposure**
Prolonged and repeated exposure to uncured epoxy hardener may lead to skin sensitization.

· **11.2 Information on other hazards**

· **Endocrine disrupting properties**		
61788-44-1	phenol, styrenated	List II

SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:**
Very toxic to aquatic life with long lasting effect.
Avoid release to the environment.
Collect spillage.

· **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** For information on endocrine disrupting properties see section 11.

· **12.7 Other adverse effects**
· **Remark:** Very toxic for fish

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· **Additional ecological information:**
· **General notes:**
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation** This material and its container must be disposed of as hazardous waste.

· **European waste catalogue**	
HP6	Acute Toxicity
HP8	Corrosive
HP14	Ecotoxic

· **Uncleaned packaging:**
· **Recommendation:**
Containers may still present a chemical hazard/ danger when empty.
Dispose of contents in accordance with all local, regional, national, and international regulations.
Where possible retain label warnings and SDS and observe all notices pertaining to the product.

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SECTION 14: Transport information

· **14.1 UN number or ID number**
· **ADR, IMDG, IATA** UN2735

· **14.2 UN proper shipping name**
· **ADR, IMDG** AMINES, LIQUID, CORROSIVE, N.O.S. (trimethylhexane-1,6-diamine, polyoxypropylene diamine)
· **IATA** Amines, liquid, corrosive, n.o.s. (trimethylhexane-1,6-diamine, polyoxypropylene diamine)

· **14.3 Transport hazard class(es)**
· **ADR, IMDG, IATA**

· **Class** 8 Corrosive substances.
· **Label** 8

· **14.4 Packing group**
· **ADR, IMDG, IATA** II

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· **14.5 Environmental hazards:**	Product contains environmentally hazardous substances: Amines, coco alkyl
· **Marine pollutant:**	MARINE POLLUTANT
· **Special marking (ADR):**	ENVIRONMENTALLY HAZARDOUS
· **Special marking (IATA):**	ENVIRONMENTALLY HAZARDOUS
· **14.6 Special precautions for user**	Not applicable.
· **Hazard identification number (Kemler code):**	80
· **EMS Number:**	F-A,S-B
· **Segregation groups**	(SGG18) Alkalis
· **Stowage Category**	A
· **Segregation Code**	SG35 Stow "separated from" SGG1-acids
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.

· **Transport/Additional information:**

Limited Quantity

832FX-450ML, 832FX-1.7L

· **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 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (TRIMETHYLHEXANE-1,6-DIAMINE, POLYOXYPROPYLENE DIAMINE), 8, II

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SECTION 15: Regulatory information

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

· **Poisons Act**

· **Regulated explosives precursors (Part 1)**
None of the ingredients is listed.

· **Regulated poisons (Part 2)**
None of the ingredients is listed.

· **Reportable explosives precursors (Part 3)**
None of the ingredients is listed.

· **Reportable poisons (Part 4)**
None of the ingredients is listed.

· **Directive 2012/18/EU**
- · **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- · **Seveso category** E1 Hazardous to the Aquatic Environment
- · **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- · **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 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 ingredients is listed.

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**
None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**
None of the ingredients is 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 ingredients is listed.

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

SECTION 16: Other information

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

· **Relevant phrases**
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
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.

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H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

· **Classification according to Regulation (EC) No 1272/2008**	
Acute toxicity - oral Skin corrosion/irritation Serious eye damage/irritation Skin sensitisation Specific target organ toxicity (repeated exposure) Hazardous to the aquatic environment - short-term (acute) aquatic hazard Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· **Department issuing SDS:** Regulatory department
· **Contact:** sds@mgchemicals.com
· **Date of previous version:** 04.06.2024
· **Version number of previous version:** 6.01
· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international 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)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
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
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
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 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 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
· *** Data compared to the previous version altered.**