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

1.1 Product identifier

Trade name/designation

IW99-0000-08E	AquaChoice Sport B MachOne Hardener 0000 colorless HighGloss 80
UFI:	0N33-81NS-200C-Q4TR

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

Relevant identified uses

Reserved for industrial and professional use. Plating agent

Uses advised against

Do not use for injecting or spraying.

1.3 Details of the supplier of the safety data sheet

Supplier

Berger-Seidle GmbH
Maybachstr. 2
67269 Grünstadt
Germany

Telephone: +49 6359 8005-0
Email: info@berger-seidle.de
Website: www.berger-seidle.de

Department responsible for information

Email (competent person)	Sicherheitsdaten@berger-seidle.de
Information telephone	+49 6359 8005 0

1.4 Emergency telephone number

Emergency telephone number 24 hr. emergency phone number	+49 700 24112112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Eye Dam. 1	H318 Causes serious eye damage.
Skin Corr. 1B	H314 Causes severe skin burns and eye damage.
Skin Sens. 1	H317 May cause an allergic skin reaction.
Aquatic Chronic 2	H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



GHS05 GHS07 GHS09

Signal word

Danger

Hazard statements

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe vapours.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing and eye protection/face 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.
P391	Collect spillage.

Hazard components for labelling

1-[3-(aminomethyl)phenyl]methanamine
2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine
3-aminomethyl-3,5,5-trimethylcyclohexylamine

Supplemental hazard information

not applicable

2.3 Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 3: Composition/information on ingredients.

3.2 Mixtures

Description

Epoxidharz

Hazardous ingredients

CAS No. EC No. Index No.	Substance name REACH No. Classification according to Regulation (EC) No 1272/2008 [CLP]	weight-%
- - -	**polyether polyamine** Aquatic Chronic 2 H411	15,0 < 20,0
68784-98-5 - -	**Polyamine** Aquatic Acute 1 H400 / Aquatic Chronic 1 H410	15,0 < 20,0
64-17-5 200-578-6 603-002-00-5	**ethanol; ethyl alcohol** 01-2119457610-43-XXXX Flam. Liq. 2 H225 / Eye Irrit. 2 H319 Specific concentration limit (SCL) Eye Irrit. 2 H319: >= 50,00	8,00 < 10,0
67-63-0 200-661-7 603-117-00-0	**isopropanol; isopropyl alcohol; propan-2-ol** 01-2119457558-25-XXXX Flam. Liq. 2 H225 / Eye Irrit. 2 H319 / STOT SE 3 H336	3,00 < 5,00
90530-15-7 292-053-3 -	**2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine** Skin Corr. 1B H314 / Skin Sens. 1 H317 / Eye Dam. 1 H318 / Aquatic Chronic 2 H411	3,00 < 5,00
1477-55-0 216-032-5 -	**1-[3-(aminomethyl)phenyl]methanamine** 01-2119480150-50-XXXX Acute Tox. 4 H302 / Skin Corr. 1B H314 / Skin Sens. 1 H317 / Eye Dam. 1 H318 / Acute Tox. 4 H332 / Aquatic Chronic 3 H412	2,50 < 3,00
2855-13-2 220-666-8 612-067-00-9	**3-aminomethyl-3,5,5-trimethylcyclohexylamine** 01-2119514687-32-XXXX Acute Tox. 4 H302 / Skin Corr. 1B H314 / Skin Sens. 1A H317 / Eye Dam. 1 H318 Specific concentration limit (SCL) Skin Sens. 1A H317: >= 0,001	2,00 < 2,50

Remark

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

Following inhalation

In case of irregular breathing or respiratory arrest provide artificial respiration.Remove casualty to fresh air and keep warm and at rest.

Following skin contact

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

In all cases of doubt, or when symptoms persist, seek medical advice.

4.3 Indication of any immediate medical attention and special treatment needed

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

alcohol resistant foam, Carbon dioxide (CO2), Powder, spray mist, (water)

Unsuitable extinguishing media

Strong water jet

5.2 Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3 Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

For containment

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

For cleaning up

Clean using cleansing agents. Do not use solvents.

6.4 Reference to other sections

Safe handling: see section 7
Personal protection equipment: refer to section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling

Avoid contact with skin, eyes and clothes. Personal protection equipment: see section 8. Do not empty containers with pressure -

no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Advices on general occupational hygiene

When using do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

* Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store containers carefully closed and upright to prevent any leaks.

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Storage class LGK8B - Non-combustible corrosive substances

Further information on storage conditions

* Keep container tightly closed. Smoking is forbidden. Access only for authorised persons. Store containers carefully closed and upright to prevent any leaks. Store in a well-ventilated and dry room at temperatures between 5 °C and 25 °C.

7.3 Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

CAS No.	Substance name	Source	Long-term /short-term (peak limitation)
64-17-5	ethanol; ethyl alcohol	WEL	1,920 / - (-) mg/m³
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	WEL	999 / 1,250 (-) mg/m³

Additional information

Long-term: Long-term occupational exposure limit value
short-term: short-term occupational exposure limit value

Biological limit values

No data available

DNEL worker

CAS No.	Substance name	DNEL type	DNEL value
1477-55-0	1-[3-(aminomethyl)phenyl]methanamine	Long-term – inhalation, systemic effects	1.2 mg/m³
1477-55-0	1-[3-(aminomethyl)phenyl]methanamine	Long-term – inhalation, local effects	0.2 mg/m³
1477-55-0	1-[3-(aminomethyl)phenyl]methanamine	Long-term - dermal, systemic effects	0.33 mg/kg bw/day
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	Acute - inhalation, local effects	0.073 mg/m³
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	Long-term – inhalation, local effects	0.073 mg/m³
64-17-5	ethanol; ethyl alcohol	Long-term – inhalation, systemic effects	380 mg/m³
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	Long-term – inhalation, systemic effects	500 mg/m³
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	Long-term - dermal, systemic effects	888 mg/kg bw/day

DNEL Consumer

CAS No.	Substance name	DNEL type	DNEL value
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	Long-term - oral, systemic effects	0.3 mg/kg bw/day
64-17-5	ethanol; ethyl alcohol	Long-term – inhalation, systemic effects	114 mg/m³

67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	Long-term – inhalation, systemic effects	89 mg/m³
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	Acute - inhalation, systemic effects	178
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	Long-term - dermal, systemic effects	319 mg/kg bw/day
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	Long-term - oral, systemic effects	26 mg/kg bw/day

PNEC

	CAS No.	Substance name	PNEC type	PNEC Value
	1477-55-0	1-[3-(aminomethyl)phenyl]methanamine	aquatic, intermittent release	0.152 mg/L
*	1477-55-0	1-[3-(aminomethyl)phenyl]methanamine	aquatic, marine water	0.0094 mg/L
	1477-55-0	1-[3-(aminomethyl)phenyl]methanamine	sewage treatment plant	10 mg/L
	1477-55-0	1-[3-(aminomethyl)phenyl]methanamine	sediment, freshwater	12.4 mg/kg sediment dw
	1477-55-0	1-[3-(aminomethyl)phenyl]methanamine	sediment, marine water	1.24 mg/kg sediment dw
	90530-15-7	2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine	aquatic, intermittent release	0.992 mg/L
*	90530-15-7	2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine	aquatic, marine water	0.00099 mg/L
	90530-15-7	2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine	sewage treatment plant	4.65 mg/L
	90530-15-7	2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine	sediment, freshwater	96.97 mg/kg sediment dw
	90530-15-7	2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine	sediment, marine water	9.68 mg/kg sediment dw
	2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	aquatic, intermittent release	0.23 mg/L
	2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	aquatic, marine water	0.006 mg/L
	2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	sewage treatment plant	3.18 mg/L
	2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	sediment, freshwater	5.784 mg/kg sediment dw
	2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	sediment, marine water	0.578 mg/kg sediment dw
	64-17-5	ethanol; ethyl alcohol	aquatic, intermittent release	2.75 mg/L
	64-17-5	ethanol; ethyl alcohol	aquatic, marine water	0.79 mg/L
	64-17-5	ethanol; ethyl alcohol	sewage treatment plant	580 mg/L
	64-17-5	ethanol; ethyl alcohol	sediment, freshwater	3.6 mg/kg sediment dw
	64-17-5	ethanol; ethyl alcohol	sediment, marine water	2.9
	67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC soil, freshwater	28 mg/kg
	67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC sediment, marine water	552 mg/kg
	67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC sediment, freshwater	552 mg/kg
	67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC Secondary Poisoning	160 mg/kg
	67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC aquatic, marine water	140.9 mg/L
	67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC aquatic, freshwater	140.9 mg/L
	67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC sewage treatment plant (STP)	2,251 mg/L

8.2 Exposure controls

Provide good ventilation.This can be achieved with local or room suction.

Personal protection equipment

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Hand protection

Suitable material: NBR (Nitrile rubber)
Thickness of the glove material >= 0.4 mm
Breakthrough time >= 480 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together

with the supplier of these gloves. Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles: EN ISO 374

Skin protection

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Eye glasses with side protection: EN 166

Body protection

When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. Anti-static clothing including shoes are recommended.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid	
Colour	transparent	
Odour	characteristic	
pH at 20.0 °C (100%)	8	DIN EN ISO 19396-1
Melting point/freezing point	-89.5 °C	
	Source: isopropanol; isopropyl alcohol; propan-2-ol	
Initial boiling point and boiling range	78.5 °C	
	Source: ethanol; ethyl alcohol	
Flash point	not determined	
flammability	not applicable	
Lower explosion limit at 20°C	2 Vol-%	
	Source: isopropanol; isopropyl alcohol; propan-2-ol	
Upper explosion limit at 20°C	15 Vol-%	
	Source: ethanol; ethyl alcohol	
Vapour pressure at 20°C	14.360072 mbar	
Relative vapour density	not applicable	
Density at 20 °C	1.01 kg/l	
Water solubility at 20°C	partially soluble	
Partition coefficient: n-octanol/water	see section 12	
Ignition temperature in °C	> 360 °C	
	Source: 2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine	
Decomposition temperature	not determined	
Viscosity at 20 °C	270 mm²/s	
particle characteristics	not applicable	

9.2

aromatic hydrocarbons	0.0 %

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3 Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4 Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

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

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Overall assessment on CMR properties

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.

Practical experience/human evidence

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: Headache, Dizziness, fatigue, amyosthenia, Dizziness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

11.2 Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Acute (short-term) fish toxicity
3-aminomethyl-3,5,5-trimethylcyclohexylamine
LC50: (Leuciscus idus (golden orfe)): 110 mg/L (96 h)

Acute (short-term) toxicity to algae and cyanobacteria
EC50 (Desmodesmus subspicatus): > 50 mg/L (72 h)

EC10: (Desmodesmus subspicatus): 11.2 mg/L (72 h)

Toxicity to microorganisms
EC10: 1,120 mg/L (18 h)

12.2 Persistence and degradability

isopropanol; isopropyl alcohol; propan-2-ol
Biodegradation = 2.32 %

Biodegradation = 62 %

12.3 Bioaccumulative potential

* **isopropanol; isopropyl alcohol; propan-2-ol**
Partition coefficient: n-octanol/water = 0.16

Partition coefficient: n-octanol/water = 1.34 (2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine)

Partition coefficient: n-octanol/water = 0.99 (3-aminomethyl-3,5,5-trimethylcyclohexylamine)

Partition coefficient: n-octanol/water = -0.31 (ethanol; ethyl alcohol)

Partition coefficient: n-octanol/water = 0.18 (1-[3-(aminomethyl)phenyl]methanamine)

* Partition coefficient: n-octanol/water = 0.05 (isopropanol; isopropyl alcohol; propan-2-ol)

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Do not empty into drains; dispose of this material and its container in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Waste codes/waste designations according to EWC/AVV

080111* - Waste paint and varnish containing organic solvents or other dangerous substances
* Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Other disposal recommendations

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1 UN number or ID number

UN 1719

14.2 UN proper shipping name

Land transport (ADR/RID)

Caustic alkali liquid, n.o.s. (ISOPHORONEDIAMINE, M-XYLENE DIAMINE)

Sea transport (IMDG)

Caustic alkali liquid, n.o.s. (contains ISOPHORONEDIAMINE, M-XYLENE DIAMINE, POLYETHERPOLYAMIN)

Air transport (ICAO-TI / IATA-DGR)

Caustic alkali liquid, n.o.s. (contains ISOPHORONEDIAMINE, M-XYLENE DIAMINE)

14.3 Transport hazard class(es)

Land transport (ADR/RID)	8
Sea transport (IMDG)	8
Air transport (ICAO-TI / IATA-DGR)	8

14.4 Packing group

Land transport (ADR/RID)	II
Sea transport (IMDG)	II
Air transport (ICAO-TI / IATA-DGR)	II

14.5 Environmental hazards

Land transport (ADR/RID)	ENVIRONMENTALLY HAZARDOUS
Sea transport (IMDG)	Marine pollutant / Polyamine

14.6 Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8

14.7 Maritime transport in bulk according to IMO instruments

No transport as bulk according to IBC Code.

14.8 Additional information

Land transport (ADR/RID)

Tunnel restriction code: E
Limited quantity (LQ): 1 l
Hazard identification number (Kemler No.): 80

Sea transport (IMDG)

Segregation group: IMDG-Code segregation group 18 - Alkalis
EmS-No.: F-A, S-B
Limited quantity (LQ): 1 l

Air transport (ICAO-TI / IATA-DGR)

not applicable

SECTION 15: Regulatory information

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

EU legislation

Authorisations and/or restrictions on use

Regulation (EC) No. 1907/2006 (REACH), Annex XVII (restrictions)

Use restriction according to REACH annex XVII, no.: 03, 40

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regulations, if applicable.
Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC) or stricter national regulations, if applicable.

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

* VOC value: 156 g/l

* **Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]**
Hazard categories / Named dangerous substances

* E2 Hazardous to the aquatic environment in Category Chronic 2
Quantity 1: 200t; Quantity 2: 500t

* **National regulations**

Observe in addition any national regulations!

* **Substance/product listed in the following inventories**

U.S. Toxic Substances Control Act (TSCA) - US

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

List of relevant hazard statements and/or precautionary statements from sections 2 to 15

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Eye Dam. 1	Calculation method.
Skin Corr. 1B	Calculation method.
Skin Sens. 1	Calculation method.
Aquatic Chronic 2	Calculation method.

Key literature references and sources for data

Data arise from reference works and literature.

Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL: Occupational Exposure Limit Value
BLV: Biological limit values
CAS: Chemical Abstracts Service
CLP: Classification, Labelling and Packaging
CMR: Carcinogenic, Mutagenic and Reprotoxic
DIN: German Institute for Standardization / German industrial standard
DNEL: Derived No-Effect Level
EAKV: European Waste Catalogue Directive
EC: Effective Concentration
EC: European Community
EN: European Standard
EU/EEA: European Economic Area
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI: International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code: International Maritime Code for Dangerous Goods
ISO: International Organization for Standardization
LC: Lethal Concentration
LD: Lethal Dose
MAK:
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD: Organisation for Economic Cooperation and Development
PBT: persistent, bioaccumulative, toxic
PNEC: Predicted No Effect Concentration
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
UN: United Nations
VOC: Volatile Organic Compounds
vPvB: very persistent and very bioaccumulative

Indication of changes

* Data changed compared with the previous version.