

Safety Data Sheet

according to UK REACH Regulation

Hardener L

Revision date: 29.04.2023

Product code: 100145

Page 1 of 10

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Hardener L

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

epoxy resin hardener

1.3. Details of the supplier of the safety data sheet

Company name: R&G Faserverbundwerkstoffe GmbH

Street: Im Meißel 7 - 13

Place: D-71111 Waldenbuch

Post-office box: 1145

D-71107 Waldenbuch

Telephone: +49-7157-530460

Telefax: +49-7157-530470

e-mail: info@r-g.de

Contact person: Michael Groß

e-mail: info@r-g.de

Internet: www.r-g.de

Responsible Department: Management

1.4. Emergency telephone number: Vergiftungs-Informations-Zentrale Freiburg
Tel: +49 (0)761 19240**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Reproductive toxicity: Repr. 2

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Harmful if swallowed.

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure.

Harmful to aquatic life with long lasting effects.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

3-aminomethyl-3,5,5-trimethyl-cyclohexylamine

benzyl alcohol

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol A diglycidyl ether homopolymer

2-piperazin-1-ylethylamine

Phenol, styrenated

salicylic acid

3-aminopropyltriethoxysilane

Signal word: Danger**Pictograms:****Hazard statements**

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H361 Suspected of damaging fertility or the unborn child.

Safety Data Sheet

according to UK REACH Regulation

Hardener L

Revision date: 29.04.2023

Product code: 100145

Page 2 of 10

H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P311 Call a POISON CENTER/doctor.
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.

2.3. Other hazards

Results of PBT and vPvB assessment: not applicable

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine			25 - 50 %
	220-666-8	612-067-00-9	01-2119514687-32	
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1, Aquatic Chronic 3; H312 H302 H314 H318 H317 H412			
100-51-6	benzyl alcohol			25 - 50 %
	202-859-9	603-057-00-5	01-2119492630-38	
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H332 H302 H319			
140-31-8	2-piperazin-1-ylethylamine			2,5 - 9 %
	205-411-0	612-105-00-4		
	Acute Tox. 3, Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, Aquatic Chronic 3; H311 H302 H314 H317 H412			
919-30-2	3-aminopropyltriethoxysilane			<= 2,5 %
	213-048-4	612-108-00-0	01-2119480479-24	
	Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1; H302 H314 H318 H317			
61788-44-1	Phenol, styrenated			<= 2,5 %
	262-975-0		01-2119980970-27	
	Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H317 H411			
69-72-7	salicylic acid			<= 2,5 %
	200-712-3	607-732-00-5	01-2119486984-17	
	Repr. 2, Acute Tox. 4, Eye Dam. 1; H361d H302 H318			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
2855-13-2	220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine	25 - 50 %
		dermal: LD50 = 1840 mg/kg; oral: LD50 = 1030 mg/kg	
100-51-6	202-859-9	benzyl alcohol	25 - 50 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 = 1620 mg/kg	
140-31-8	205-411-0	2-piperazin-1-ylethylamine	2,5 - 9 %
		dermal: LD50 = 866 mg/kg; oral: LD50 = > 1470 mg/kg	
919-30-2	213-048-4	3-aminopropyltriethoxysilane	<= 2,5 %
		dermal: LD50 = 4000 mg/kg; oral: LD50 = 1780 mg/kg	
61788-44-1	262-975-0	Phenol, styrenated	<= 2,5 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg	
69-72-7	200-712-3	salicylic acid	<= 2,5 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = 891 mg/kg	

SECTION 4: First aid measures**4.1. Description of first aid measures**

Safety Data Sheet

according to UK REACH Regulation

Hardener L

Revision date: 29.04.2023

Product code: 100145

Page 3 of 10

General information

Remove contaminated, saturated clothing immediately.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

Wash with plenty of water/soap. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Provide fresh air. Immediately call a doctor.

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

No further relevant information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Carbon dioxide (CO₂). Extinguishing powder. Water spray. In case of major fire and large quantities: Water spray jet, alcohol resistant foam.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Gases/vapours, toxic, Gases/vapours, corrosive.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Dispose of waste according to applicable legislation.

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

Use personal protection equipment. Provide adequate ventilation. Evacuate area.

6.2. Environmental precautions

Do not discharge into drains, surface or groundwater.

Do not allow to enter subsoil/soil/subsoil.

Collect and dispose of contaminated water.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Provide adequate ventilation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe gas/fumes/vapour/spray. Use personal protection equipment.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed and dry. Keep/Store only in original container. Provide for retaining containers, e.g. floor pan without outflow.

Hints on joint storage

Do not store together with:

Oxidising agent

Food and feedingstuffs

Safety Data Sheet

according to UK REACH Regulation

Hardener L

Revision date: 29.04.2023

Product code: 100145

Page 4 of 10

Further information on storage conditions

storage temperature 15 - 20 °C. Keep receptacles tightly sealed.

Keep only in the original container.

Provide for retaining containers, e.g. floor pan without outflow.

7.3. Specific end use(s)

epoxy resin hardener

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****DNEL/DMEL values**

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine			
Worker DNEL,		inhalation		20,1 mg/m³
100-51-6	benzyl alcohol			
Worker DNEL, long-term		dermal		9,5 mg/kg bw/day
Worker DNEL, long-term		inhalation		22 mg/m³
140-31-8	2-piperazin-1-ylethylamine			
Worker DNEL, acute		dermal		20 mg/kg bw/day
Worker DNEL, acute		inhalation		21,4 mg/m³
61788-44-1	Phenol, styrenated			
Worker DNEL,		dermal		2,1 mg/kg bw/day
Worker DNEL,		inhalation		7,4 mg/m³

PNEC values

CAS No	Substance		
Environmental compartment			Value
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine		
Freshwater			0,06 mg/l
Marine water			0,006 mg/l
100-51-6	benzyl alcohol		
Freshwater			1 mg/l
Marine water			0,1 mg/l
140-31-8	2-piperazin-1-ylethylamine		
Freshwater			0,058 mg/l
Marine water			0,0058 mg/l
61788-44-1	Phenol, styrenated		
Freshwater			0,03 mg/l
Marine water			0,003 mg/l
69-72-7	salicylic acid		
Freshwater			0,2 mg/l
Marine water			0,02 mg/l

8.2. Exposure controls**Appropriate engineering controls**

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. When using do not eat, drink or smoke. When using do not eat or drink. Avoid contact with eyes and skin. Do not breathe gas/fumes/vapour/spray. Keep away from food, drink and animal feedingsuffs.

Safety Data Sheet

according to UK REACH Regulation

Hardener L

Revision date: 29.04.2023

Product code: 100145

Page 5 of 10

Eye/face protection

Tightly sealed safety glasses.

Hand protection

Wear suitable gloves.

Suitable material:

NBR (Nitrile rubber), FKM (fluoro rubber)

Thickness of the glove material $\geq 0,5$ mm

Unsuitable material: Thick fabric., Leather articles

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Protect skin by using skin protective cream.

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.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Combination filtering device A-P2

Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	light yellow
Odour:	like: Amines
Odour threshold:	not determined

Test method

pH-Value:	not applicable
-----------	----------------

Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	> 200 °C
Flash point:	> 100 °C

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

not explosive.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature:	not determined
----------------------------	----------------

Oxidizing properties

Not oxidising.

Vapour pressure:	not determined
Density (at 23 °C):	0,998 g/cm ³ ISO 2811-2
Water solubility:	Immiscible

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined
----------------------------------------	----------------

Safety Data Sheet

according to UK REACH Regulation

Hardener L

Revision date: 29.04.2023

Product code: 100145

Page 6 of 10

Viscosity / dynamic:
(at 25 °C)

115 mPa·s ISO 3219

Viscosity / kinematic:

not determined

Relative vapour density:

not determined

Evaporation rate:

not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

In case of fire may be liberated: Gases/vapours, toxic, Gases/vapours, corrosive.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

Harmful if swallowed.

ATEmix calculated

ATE (oral) 1143,9 mg/kg; ATE (inhalation aerosol) 3,846 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine				
	oral	LD50 mg/kg	1030	Rat	Manufacturer
	dermal	LD50 mg/kg	1840	Rabbit	Manufacturer
100-51-6	benzyl alcohol				
	oral	LD50 mg/kg	1620	Rat	Manufacturer
	inhalation vapour	ATE	11 mg/l		
	inhalation aerosol	ATE	1,5 mg/l		
140-31-8	2-piperazin-1-ylethylamine				
	oral	LD50 mg/kg	> 1470	Rat	Manufacturer
	dermal	LD50	866 mg/kg	Rabbit	Manufacturer
919-30-2	3-aminopropyltriethoxysilane				
	oral	LD50 mg/kg	1780	Rat	Manufacturer
	dermal	LD50 mg/kg	4000	Rabbit	Manufacturer
61788-44-1	Phenol, styrenated				
	oral	LD50 mg/kg	> 2000	Rat	Manufacturer
	dermal	LD50 mg/kg	> 2000	Rabbit	Manufacturer
69-72-7	salicylic acid				
	oral	LD50	891 mg/kg	Rat	Manufacturer
	dermal	LD50 mg/kg	> 2000	Rat	Manufacturer

Safety Data Sheet

according to UK REACH Regulation

Hardener L

Revision date: 29.04.2023

Product code: 100145

Page 7 of 10

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (3-aminomethyl-3,5,5-trimethylcyclohexylamine; 2-piperazin-1-ylethylamine; 3-aminopropyltriethoxysilane; Phenol, styrenated)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging fertility or the unborn child. (salicylic acid)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: 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

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

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

SECTION 12: Ecological information**12.1. Toxicity**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine					
	Acute fish toxicity	LC50 110 mg/l	96 h	Leuciscus idus (golden orfe)	Manufacturer	EG 88/449
	Acute algae toxicity	ErC50 > 50 mg/l	72 h	Scenedesmus subspicatus	Manufacturer	EG 88/302
	Acute crustacea toxicity	EC50 23 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer	OECD 202
100-51-6	benzyl alcohol					
	Acute fish toxicity	LC50 460 mg/l	96 h	Pimephales promelas (fathead minnow)	Manufacturer	
	Acute algae toxicity	ErC50 640 mg/l	96 h	Scenedesmus subspicatus	Manufacturer	
	Acute bacteria toxicity	(400 mg/l)	0,5 h	Pseudomonas putida	Manufacturer	
140-31-8	2-piperazin-1-ylethylamine					
	Acute crustacea toxicity	EC50 58 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer	
61788-44-1	Phenol, styrenated					
	Acute algae toxicity	ErC50 3,14 mg/l	72 h	Scenedesmus subspicatus	Manufacturer	
69-72-7	salicylic acid					
	Acute fish toxicity	LC50 1370 mg/l	96 h	Pimephales promelas (fathead minnow)	Manufacturer	
	Acute algae toxicity	ErC50 mg/l > 100	72 h	Scenedesmus subspicatus	Manufacturer	
	Acute crustacea toxicity	EC50 870 mg/l	48 h	Daphnia magna	Manufacturer	

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. Other adverse effects

No further relevant information available.

Safety Data Sheet

according to UK REACH Regulation

Hardener L

Revision date: 29.04.2023

Product code: 100145

Page 8 of 10

Further information

Do not let the product enter the groundwater, open water, or the sewerage system.
 Undiluted or nonneutralised product may not enter waste water channel or main outfall.
 Harmful to aquatic life.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

For disposal, comply with local regulations. Dispose of liquid component in a suitable incinerator. Product can be disposed of with household waste after curing.

List of Wastes Code - residues/unused products

080299 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of other coatings (including ceramic materials); wastes not otherwise specified

List of Wastes Code - used product

080299 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of other coatings (including ceramic materials); wastes not otherwise specified

Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number:**

UN 2735

14.2. UN proper shipping name:

AMINE, FLÜSSIG, ÄTZEND, N.A.G.
 (3-aminomethyl-3,5,5-trimethyl-cyclohexylamine, benzyl alcohol)

14.3. Transport hazard class(es):

8

14.4. Packing group:

III

Hazard label:

8



Classification code:

C7

Limited quantity:

5 L

Excepted quantity:

E1

Transport category:

3

Hazard No:

80

Tunnel restriction code:

E

Other applicable information (land transport)

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

Inland waterways transport (ADN)**14.1. UN number:**

UN 2735

14.2. UN proper shipping name:

AMINE, FLÜSSIG, ÄTZEND, N.A.G.
 (3-aminomethyl-3,5,5-trimethyl-cyclohexylamine, benzyl alcohol)

14.3. Transport hazard class(es):

8

14.4. Packing group:

III

Hazard label:

8



Classification code:

C7

Limited quantity:

5 L

Excepted quantity:

E1

Other applicable information (inland waterways transport)

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

Marine transport (IMDG)**14.1. UN number:**

UN 2735

Safety Data Sheet

according to UK REACH Regulation

Hardener L

Revision date: 29.04.2023

Product code: 100145

Page 9 of 10

14.2. UN proper shipping name:AMINES, LIQUID, CORROSIVE, N.O.S.
(3-aminomethyl-3,5,5-trimethyl-cyclohexylamine, benzyl alcohol)**14.3. Transport hazard class(es):**

8

14.4. Packing group:

III

Hazard label:

8



Limited quantity:

5 L

Excepted quantity:

E1

EmS:

F-A, S-B

Segregation group:

18 - alkalis

Air transport (ICAO-TI/IATA-DGR)**14.1. UN number:**

UN 2735

14.2. UN proper shipping name:AMINES, LIQUID, CORROSIVE, N.O.S.
(3-aminomethyl-3,5,5-trimethyl-cyclohexylamine, benzyl alcohol)**14.3. Transport hazard class(es):**

8

14.4. Packing group:

III

Hazard label:

8



Limited quantity Passenger:

5 L

Excepted quantity:

E1

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:

No

14.6. Special precautions for user

Warning: Corrosive

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3

2004/42/EC (VOC):

26,25 %

Information according to 2012/18/EU
(SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

Additional information

German Chemicals Prohibition Ordinance (ChemVerbotsV)

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

2 - obviously hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information**Abbreviations and acronyms**

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

Safety Data Sheet

according to UK REACH Regulation

Hardener L

Revision date: 29.04.2023

Product code: 100145

Page 10 of 10

PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
Repr. 2; H361	
STOT RE 2; H373	
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
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.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)