

Page 1/13

# Safety data sheet according to UK REACH

Printing date 12.04.2025 Version number 46 (replaces version 45) Revision: 12.04.2025

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

· 1.1 Product identifier

· Trade name MC-DUR LF 480 - Komponente B

665 · Article number:

· 1.2 Relevant identified uses of the substance or mixture

and uses advised against No further relevant information available.

· Application of the substance

/ the mixture Epoxy impregnation

Hardening agent/ Curing agent

· 1.3 Details of the supplier of the safety data sheet

MC-Bauchemie Müller GmbH & Co. KG · Manufacturer/Supplier:

Am Kruppwald 1-8 D-46238 Bottrop Tel.: +49(0)2041-101-0 Fax.: +49(0)2041-101-400 E-Mail: info@mc-bauchemie.de

MC-Bauchemie AG Hagackerstr. 10 CH-8953 Dietikon Tel.: +44-7400510 Fax: +44-7400533

Informing department:

· 1.4 Emergency telephone

number:

Tel.: +49 / (0)700 24112112 (MCR)

Tel.: +1 872 5888271 (MCR)

msds@mc-bauchemie.de

## **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. Acute Tox. 4 H312 Harmful in contact with skin.

Skin Corr. 1A 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.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn Repr. 2

child.

STOT SE 3 H335 May cause respiratory irritation.

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

Aquatic Chronic 3 H412 Harmful 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.

(Contd. on page 2)



(Contd. of page 1)



# Safety data sheet according to UK REACH

Revision: 12.04.2025 Printing date 12.04.2025 Version number 46 (replaces version 45)

#### Trade name MC-DUR LF 480 - Komponente B

· Hazard pictograms

GHS07

· Signal word Danger

· Hazard-determining

· Hazard statements

components of labelling: 2-Methylpentamethylenediamine

Isophorone diamine 2-piperazin-1-ylethylamine

Polymer with amino-functional groups

Phenol, mono- and distyrolised H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H361fd Suspected of damaging fertility. Suspected of damaging

the unborn child.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or

repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Do not breathe dusts or mists. · Precautionary statements P260

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water [or

shower1.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for

several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label). P362+P364

Take off contaminated clothing and wash it

before reuse.

P403+P233 Store in a well-ventilated place. Keep container

tightly closed.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable. · vPvB: Not applicable.

## **SECTION 3: Composition/information on ingredients**

P310

· 3.2 Mixtures

Description: Mixture consisting of the following components.

Dangerous components: EC number: 949-140-2 Polymer with amino-functional groups Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1B,

(Contd. on page 3)

30-60%



Page 3/13

# Safety data sheet according to UK REACH

Printing date 12.04.2025 Version number 46 (replaces version 45) Revision: 12.04.2025

#### Trade name MC-DUR LF 480 - Komponente B

CAS: 15520-10-2	2-Methylpentamethylenediamine	≥20-≤30%
EINECS: 239-556-6	Skin Corr. 1A, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; STOT SE 3, H335	
CAS: 100-51-6	Benzyl alcohol	10-30%
EINECS: 202-859-9	Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	
CAS: 2855-13-2	Isophorone diamine	≥10-<25%
EINECS: 220-666-8 Reg.nr.: 01-2119514687-32	Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412 ATE: LD50 oral: 1030 mg/kg Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.001 %	
CAS: 140-31-8	2-piperazin-1-ylethylamine	≥5-<10%
EINECS: 205-411-0 Reg.nr.: 01-2119471486-30	Repr. 2, H361fd; STOT RE 1, H372; Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	
	Phenol, mono- and distyrolised	≥1-<1.5%
	Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1A, H317	

## **SECTION 4: First aid measures**

· 4.1 Description of first aid measures

General information Remove contaminated clothing immediately. Consult a doctor if

symptoms occur. Move affected person to fresh air.

· After inhalation Supply fresh air; seek medical advice if symptoms occur.

If unconscious, place in recovery position and seek medical advice.

• After skin contact In case of contact with skin, wash carefully with plenty of soap and

water. Consult a doctor in case of skin reactions.

· After eye contact Rinse opened eye for several minutes under running water.

Call a doctor immediately

• After swallowing Rinse mouth with water. Never give anything by mouth to an

unconscious person. DO NOT induce vomiting. If symptoms

persist, consult a doctor.

· 4.2 Most important symptoms and effects, both acute and

delayed Advice for the doctor: Elementary aid, decontamination,

symptomatic treatment.

Danger of gastric perforation.

GB



Page 4/13

# Safety data sheet according to UK REACH

Printing date 12.04.2025 Version number 46 (replaces version 45) Revision: 12.04.2025

Trade name MC-DUR LF 480 - Komponente B

(Contd. of page 3)

### SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· Suitable extinguishing agents CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

· For safety reasons unsuitable

extinguishing agents

Water with a full water jet.

· 5.2 Special hazards arising from the substance or

mixture

Can be released in case of fire

Carbon monoxide (CO) Nitrogen oxides (NOx)

(Traces)

· 5.3 Advice for firefighters

· Protective equipment:

Wear self-contained breathing apparatus.

#### SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

6.2 Environmental

precautions:

Wear protective equipment. Keep unprotected persons away.

Prevent material from reaching sewage system, holes and cellars. Inform respective authorities in case product reaches water or

· 6.3 Methods and material for

containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders,

universal binders, sawdust).

sewage system.

Dispose of contaminated material as waste according to item 13.

· 6.4 Reference to other

sections

See Section 8 for information on personal protection equipment.

See Section 7 for information on safe handling

# SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Open and handle containers with care.

Ventilation measures are required in rooms without sufficient air exchange (e.g. closed rooms),

because the occupational exposure limit values (see chapter 8)

could be exceeded. This must be avoided.

Wear suitable personal protective equipment (see section 8). Avoid contact with eyes, skin and clothing. Change contaminated or damaged gloves and contaminated clothing immediately and wash skin immediately. Mix slowly, partially covering the mixing container. Pour carefully and slowly when repotting. Observe the BGBau technical data sheet and practical guide for handling epoxy resins.

(Contd. on page 5)



Page 5/13

# Safety data sheet according to UK REACH

Printing date 12.04.2025 Version number 46 (replaces version 45) Revision: 12.04.2025

#### Trade name MC-DUR LF 480 - Komponente B

(Contd. of page 4)

· Information about protection

against explosions and fires: Ensure sufficient air exchange and/or extraction in the working

areas. Take precautionary measures to avoid electrostatic

discharges.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage

· Requirements to be met by

storerooms and containers: No special requirements.

Information about storage in

one common storage facility: Store away from foodstuffs.

· Further information about

storage conditions: Keep container tightly closed in a well-ventilated place.

· Storage class 8A

## SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

Components with critical values that require

PNEC 0.042 mg/l (Mew)

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.

		P
·DNELs		
CAS: 155	20-10-2	2-Methylpentamethylenediamine
Dermal	DNEL	1.5 mg/kg bw/day (ArL)
Inhalative	DNEL	0.25 mg/m³ (ArL)
		0.5 mg/m³ (Ark)
CAS: 100-	-51-6 B	enzyl alcohol
Oral	DNEL	4 mg/kg bw/Tag (ArL)
		20 mg/kg bw/Tag (Ark)
Dermal	DNEL	8 mg/kg bw/day (ArL)
		40 mg/kg bw/day (Ark)
Inhalative	DNEL	22 mg/m³ (ArL)
		110 mg/m³ (Ark)
CAS: 285	5-13-2 l	sophorone diamine
Oral	DNEL	0.526 mg/kg bw/Tag (ArL)
Inhalative	DNEL	20.1 mg/m³ (ArL)
CAS: 140-	-31-8 2-	-piperazin-1-ylethylamine
Dermal	DNEL	3.33 mg/kg bw/day (ArL)
Inhalative	DNEL	10.6 mg/m³ (ArL)
PNECs		
CAS: 155	20-10-2	2-Methylpentamethylenediamine

(Contd. on page 6)





# Safety data sheet according to UK REACH

Printing date 12.04.2025 Version number 46 (replaces version 45) Revision: 12.04.2025

#### Trade name MC-DUR LF 480 - Komponente B

(Contd. of page 5) 0.42 mg/l (Freshwater) CAS: 100-51-6 Benzyl alcohol PNEC 0.527 mg/l (Marine water sediment) 0.1 mg/l (Mew) 1 mg/l (Fresh water sediment) PNEC 0.456 mg/kg dwt (Bod) 5.27 mg/kg dwt (Fresh water sediment) CAS: 2855-13-2 Isophorone diamine PNEC 0.006 mg/l (Mew) 0.06 mg/l (Freshwater) PNEC 0.578 mg/kg dwt (Sediment) 5.784 mg/kg dwt (Fresh water sediment) CAS: 140-31-8 2-piperazin-1-ylethylamine PNEC 250 mg/l (Kla) 0.0058 mg/l (Mew) 0.058 mg/l (Freshwater) PNEC 1 mg/kg dwt (Bod) 21.5 mg/kg dwt (Sediment)

• Additional information: The lists that were valid during the compilation were used as basis.

· 8.2 Exposure controls · Appropriate engineering

controls No further data; see section 7.

215 mg/kg dwt (Fresh water sediment)

· Individual protection measures, such as personal protective equipment

· General protective and

hygienic measures Keep away from food, drink and animal feed.

Remove soiled, soaked clothing immediately. Wash hands before breaks and at the end of work.

Avoid contact with eyes and skin.

Breathing equipment: If workplace limit values cannot be complied with by ventilation

measures or if rooms cannot be technically ventilated, respiratory protection must be worn: Use combination filter A1-P2 (brown/white) in rooms that cannot be ventilated. If oxygen deficiency is expected, use self-contained breathing apparatus. Observe wearing time limits according to §9 (3) GefStoffV in conjunction

with BGR 190.

• Hand protection Selection of the glove material on consideration of the penetration

times, rates of diffusion and the degradation

• Material of gloves You can find help with choosing gloves on the website https://

www.bgbau.de/fileadmin/Gisbau/Projekte.pdf

For example, we recommend the Sol-vex 37-900 protective gloves from Ansell GmbH. The breakthrough time of the protective gloves can be found under point 8 "Penetration time of the glove material". The selection of a suitable glove depends not only on the material, but also on other quality features and varies from manufacturer to (Contd. on page 7)



Page 7/13

# Safety data sheet according to UK REACH

Printing date 12.04.2025 Version number 46 (replaces version 45) Revision: 12.04.2025

#### Trade name MC-DUR LF 480 - Komponente B

(Contd. of page 6)

manufacturer. As the product

is a preparation of several substances, the resistance of glove materials cannot be calculated in advance and must therefore be checked before use.

Nitrile rubber

Recommended material thickness:≥ 0.4 mm

Penetration time of glove material

The breakthrough times of the Sol-vex 37-900 protective gloves

are around 8 hours.

The following applies to all other gloves:

The exact breakthrough time must be obtained from the protective

glove manufacturer and adhered to.

Nitrile rubber

Material thickness: ≥ 0.40 mm Penetration time: ≥ 480 min

Butyl rubber:

Material thickness: ≥ 0.5 mm Penetration time: ≥ 480 min Tight-fitting safety goggles.

Safety goggles. · Body protection: Protective clothing

> Suitable protective clothing should be worn when working with epoxy resins. In addition to normal work clothing (long trousers, long-sleeved shirt or T-shirt), disposable overalls, aprons, overshoes, sleeve protectors etc. may be necessary depending on the activity. Uncovered areas of skin should be avoided as far as possible, even in hot weather. If the work involves kneeling, the

lower leg area should be protected by protective trousers.

## SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

Eye/face protection

· Colour: Transparent · Smell: Characteristic · Melting point/freezing point: Not determined

· Boiling point or initial boiling point and

193 °C (CAS: 15520-10-2 2 boiling range

Methylpentamethylenediamine)

· Lower and upper explosion limit

1.3 Vol % (CAS: 100-51-6 Benzyl alcohol) · Lower: 13 Vol % (CAS: 100-51-6 Benzyl alcohol) · Upper: 83 °C

· Flash point:

380 °C (CAS: 2855-13-2 3-aminomethyl-3,5,5-· Auto-ignition temperature:

trimethylcyclohexylamine)

Not determined. · pH

(Contd. on page 8)



Page 8/13

# Safety data sheet according to UK REACH

Printing date 12.04.2025 Version number 46 (replaces version 45) Revision: 12.04.2025

#### Trade name MC-DUR LF 480 - Komponente B

(Contd. of page 7)

· Viscosity:

• Kinematic viscosity
• dynamic at 20 °C:

Not determined.
300 mPas

· Solubility

· Water: Not miscible or difficult to mix

· Steam pressure at 20 °C: 0.1 hPa (CAS: 100-51-6 Benzyl alcohol)

· Vapour pressure at 50 °C: 0.7 hPa

· Density and/or relative density

· Density at 20 °C 0.98 g/cm³

· 9.2 Other information

· Appearance:

· Form: Fluid

· Important information on protection of health

and environment, and on safety.

• Self-inflammability: Product is not selfigniting. Explosive properties: Product is not explosive.

· Information with regard to physical hazard

classes

· Explosives Void · Flammable gases Void · Aerosols Void · 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 Void flammable gases in contact with water

flammable gases in contact with water

Oxidising liquids
Oxidising solids
Organic peroxides
Corrosive to metals
Desensitised explosives
Void

### SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition /

**conditions to be avoided:** No decomposition if used according to specifications.

· 10.3 Possibility of hazardous

reactions No dangerous reactions known

• 10.4 Conditions to avoid No further relevant information available.

(Contd. on page 9)



Page 9/13

# Safety data sheet according to UK REACH

Revision: 12.04.2025 Printing date 12.04.2025 Version number 46 (replaces version 45)

#### Trade name MC-DUR LF 480 - Komponente B

(Contd. of page 8)

· 10.5 Incompatible materials: No further relevant information available.

· 10.6 Hazardous

decomposition products: No dangerous decomposition products known

# **SECTION 11: Toxicological information**

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

· Acute toxicity Harmful if swallowed.

Harmful in contact with skin.

LD/LC50 values that are relevant for classification:  CAS: 15520-10-2 2-Methylpentamethylenediamine			
Oral	LD50	1170 mg/kg (rat)	
Dermal	LD50	1870 mg/kg (rabbit)	
Inhalative	LC50/4 h	19.6 mg/l (rat)	
CAS: 100	-51-6 Benzyl alcohol	* ' '	
Oral	LD50	1230 mg/kg (rat)	
	NOAEL 2nd year study	200 mg/kg (mouse)	
		200 mg/kg (rat)	
Dermal	LD50	2000 mg/kg (rabbit)	
Inhalative	LC50/4 h	>4178 mg/l (rat)	
CAS: 285	5-13-2 Isophorone dian	nine	
Oral	LD50	1030 mg/kg (ATE)	
		1030 mg/kg (rat)	
	NOAEL	250 mg/kg (rat)	
Dermal	LD50	1840 mg/kg (rabbit)	
		>2000 mg/kg (rat)	
		1840 mg/kg (rabbit)	
CAS: 140	-31-8 2-piperazin-1-ylet	hylamine	
Oral	LD50	2000-5000 mg/kg (rat)	
		500 mg/kg (rabbit)	
Dermal	LD50	200-1000 mg/kg (rabbit)	

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 Suspected of damaging fertility. Suspected of damaging the unborn

· STOT-single exposure May cause respiratory irritation.

STOT-repeated exposure May cause damage to organs through prolonged or repeated

exposure.

(Contd. on page 10)



Page 10/13

# Safety data sheet according to UK REACH

Printing date 12.04.2025 Version number 46 (replaces version 45) Revision: 12.04.2025

#### Trade name MC-DUR LF 480 - Komponente B

(Contd. of page 9)

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

· 11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

## **SECTION 12: Ecological information**

· 12.1 Toxicity

· Aquatic toxicity:
CAS: 15520-10-2 2-Methylpentamethylenediamine

EC50/72h >100 mg/l (algae) EC50 1825 mg/l (fish)

EC50/48h 19.8 mg/l (Daphnia magna)

#### CAS: 100-51-6 Benzyl alcohol

IC50/72h 700 mg/l (algae)

LC50/96h 460 mg/l (Pimephales promelas)

10 mg/l (Lepomis macrochirus)

## CAS: 2855-13-2 Isophorone diamine

LC50/96h | 110 mg/l (fish)

110 mg/l (Leucidus idus)

EC50 1120 mg/l (Pseudomonas putida)

EC50/48h | 23 mg/l (daphnia)

23 mg/l (Daphnia magna)

NOEC 1.5 mg/l (Desmodesmus subspicatus)

3 mg/l (Daphnia magna)

ErC50/72h >50 mg/l (Desmodesmus subspicatus)

>50 mg/l (algae)

#### CAS: 140-31-8 2-piperazin-1-ylethylamine

EC50/72h >1000 mg/l (algae) LC50/96h 2190 mg/l (fish)

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**The product does not contain substances with endocrine disrupting

properties.

(Contd. on page 11)



Page 11/13

# Safety data sheet according to UK REACH

Printing date 12.04.2025 Version number 46 (replaces version 45) Revision: 12.04.2025

#### Trade name MC-DUR LF 480 - Komponente B

(Contd. of page 10)

· 12.7 Other adverse effects

· Additional ecological information:

• General notes: Do not allow product to reach ground water, water bodies or

sewage system.

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

## **SECTION 13: Disposal considerations**

· 13.1 Waste treatment methods

· Recommendation Must not be disposed of together with household garbage. Do not

allow product to reach sewage system.

· Uncleaned packagings:

• Recommendation: Empty contaminated packagings thoroughly. They can be recycled

after thorough and proper cleaning.

14.1 UN number or ID number ADR, IMDG, IATA	UN2289
14.2 UN proper shipping name ADR, IMDG, IATA	ISOPHORONEDIAMINE solution
14.3 Transport hazard class(es)	
ADR Class Label	8 (C7) Corrosive substances. 8
IMDG, IATA Class Label	8 Corrosive substances. 8
14.4 Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Kemler Number: EMS Number: Stowage Category Segregation Code	Warning: Corrosive substances. 80 F-A,S-B A SG35 Stow "separated from" SGG1-acids

(Contd. on page 12)



Page 12/13

# Safety data sheet according to UK REACH

Printing date 12.04.2025 Version number 46 (replaces version 45) Revision: 12.04.2025

#### Trade name MC-DUR LF 480 - Komponente B

(Contd. of page 11)

· Transport/Additional information:

ADR

· Limited quantities (LQ) 5L · Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000

ml

· Transport category 3 · Tunnel restriction code E

· IMDG

· Limited quantities (LQ) 51

· Excepted quantities (EQ) Code: E1

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

ml

· UN "Model Regulation": UN 2289 ISOPHORONEDIAMINE SOLUTION, 8,

Ш

## **SECTION 15: Regulatory information**

· 15.1 Safety, health and environmental regulations/ legislation specific for the

**substance or mixture** No further relevant information available.

· Poisons Act

Regulated explosives precursors

None of the ingredients is listed.

· Regulated poisons

None of the ingredients is listed.

Reportable explosives precursors

None of the ingredients is listed.

· Reportable poisons

None of the ingredients is listed.

· 15.2 Chemical safety

assessment: A Chemical Safety Assessment has not been carried out.

#### **SECTION 16: Other information**

These data are based on our present knowledge. However, they 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.

H312 Harmful in contact with skin.

(Contd. on page 13)



Page 13/13

# Safety data sheet according to UK REACH

Version number 46 (replaces version 45) Revision: 12.04.2025 Printing date 12.04.2025

#### Trade name MC-DUR LF 480 - Komponente B

Department issuing data specification sheet:

(Contd. of page 12) 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. H335 May cause respiratory irritation. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H372 Causes damage to organs through prolonged or repeated H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. Environment protection department. RID: Règlement international concernant le transport des marchandises · Abbreviations and acronyms: dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation 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) DNEL: Derived No-Effect Level (UK REACH) PNEC: Predicted No-Effect Concentration (UK REACH) 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. 1A: Skin corrosion/irritation - Category 1A Skin Corr. 1B: Skin corrosion/irritation - Category 1B Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Dam. 1: Serious eye damage/eye irritation - Category 1 Eye Irrit. 2: Serious eye damage/eye irritation - Category 2 Skin Sens. 1: Skin sensitisation - Category 1 Skin Sens. 1A: Skin sensitisation - Category 1A Skin Sens. 1B: Skin sensitisation - Category 1B Repr. 2: Reproductive toxicity - Category 2 STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 STOT RE 1: Specific target organ toxicity (repeated exposure) - Category 1 STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

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

hazard - Category 3

· \* Data compared to the previous version altered.