

## Safety Data Sheet

### MAPEFLOOR I 900 /B

Safety Data Sheet dated: 17/08/2022 - version 2



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

### 1.1. Product identifier

Mixture identification:

Trade name: MAPEFLOOR I 900 /B

Trade code: 902580

UFI: 1783-P09J-S007-JK29

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

Recommended use: Hardener for epoxy products

Uses advised against: Data not available

### 1.3. Details of the supplier of the safety data sheet

Company: MAPEI Yapi Kimyasallari Insaat Sanayi ve Ticaret A.S.

Polatli Organize Sanayi Bölgesi 209 Cad. No:7 - Polatli / Ankara (Türkiye)

Phone : +90 312 626 51 52 (office hours) - Fax : +90 312 626 50 85

Responsible: sicurezza@mapei.it

Nilgöl Çetin - Certificate No: GBF-A-0-2989

### 1.4. Emergency telephone number

Number 114 UZEM (Refik Saydam Hifzissihha Merkezi Başkanlığı - Ulusal Zehir Danışma Merkezi).

## SECTION 2: Hazards identification



### 2.1. Classification of the substance or mixture

#### Regulation (EC) n. 1272/2008 (CLP)

Acute Tox. 4	Harmful if swallowed.
Eye Dam. 1	Causes serious eye damage.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 3	Harmful to aquatic life with long lasting effects.
Acute Tox. 4	Harmful if inhaled.
Skin Corr. 1C	Causes severe skin burns and eye damage.
Skin Sens. 1	May cause an allergic skin reaction.

Adverse physicochemical, human health and environmental effects:

No other hazards

### 2.2. Label elements

#### Regulation (EC) n. 1272/2008 (CLP)

#### Pictograms and Signal Words



Danger

#### Hazard statements:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

#### Precautionary statements:

P260	Do not breathe mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/clothing and eye/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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.

P312 Call a POISON CENTER if you feel unwell.

P314 Get medical advice/attention if you feel unwell.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Special Provisions:

EUH208 Contains N-(2-AMINOETHYL)-1,3-PROPANEDIAMINE. May produce an allergic reaction.

Contains:

formaldehyde, polymer with benzenamine, hydrogenated

N,N'-BIS(3-AMINOPROPYL)ETHYLENEDIAMINE

benzyl alcohol

2,4,6-tris(dimethylaminomethyl)phenol

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: MAPEFLOOR I 900 /B

Hazardous components within the meaning of the CLP regulation and related classification:

Concentra tion (%) w/w)	Name	Ident. Numb.	Classification	Registration Number
≥25 - <50 %	benzyl alcohol	CAS:100-51-6 EC:202-859-9 Index:603-057-00-5	Acute Tox. 4, H332; Acute Tox. 4, H302; Eye Irrit. 2, H319	01-2119492630-38-XXXX
≥25 - <50 %	formaldehyde, polymer with benzenamine, hydrogenated	CAS:135108-88-2 EC:603-894-6	Acute Tox. 3, H301; Eye Dam. 1, H318; STOT RE 2, H373; Aquatic Chronic 3, H412; Skin Corr. 1C, H314; Skin Sens. 1, H317	01-2119983522-33
≥5 - <10 %	N,N'-BIS(3-AMINOPROPYL)ETHYLENEDIAMINE	CAS:10563-26-5 EC:234-147-9	Acute Tox. 4, H302; Acute Tox. 3, H311; Skin Corr. 1B, H314; Skin Sens. 1A, H317	01-2119976331-37
≥5 - <10 %	2,4,6-tris(dimethylaminomethyl)phenol	CAS:90-72-2 EC:202-013-9 Index:603-069-00-0	Skin Corr. 1C, H314; Eye Dam. 1, H318; Acute Tox. 4, H302	01-2119560597-27-XXXX
≥0.49 - <1 %	N-(2-AMINOETHYL)-1,3-PROPANEDIAMINE	CAS:13531-52-7 EC:236-882-0	Acute Tox. 4, H302; Skin Corr. 1A, H314; Skin Sens. 1A, H317; Acute Tox. 2, H310	01-2120097861-45

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.  
OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose of safely.  
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Give nothing to eat or drink.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

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

Eye irritation  
Eye damages  
Skin Irritation  
Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

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### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

Suitable extinguishing media:

Water.  
Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

None in particular.

#### **5.2. Special hazards arising from the substance or mixture**

Do not inhale explosion and combustion gases.

#### **5.3. Advice for firefighters**

Use suitable breathing apparatus.

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### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment.  
Wear breathing apparatus if exposed to vapours/dusts/aerosols.  
Provide adequate ventilation.  
Use appropriate respiratory protection.

#### **6.2. Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
Limit leakages with earth or sand.

#### **6.3. Methods and material for containment and cleaning up**

Suitable material for taking up: absorbing material, organic, sand  
Retain contaminated washing water and dispose it.

#### **6.4. Reference to other sections**

See also section 8 and 13

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### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.  
Use localized ventilation system.  
Don't use empty container before they have been cleaned.  
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.  
Contaminated clothing should be changed before entering eating areas.  
Do not eat or drink while working.  
See also section 8 for recommended protective equipment.

#### **7.2. Conditions for safe storage, including any incompatibilities**

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

### 7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### List of components with OEL value

	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Note
benzyl alcohol CAS: 100-51-6	National	FINLAND		45	10			
	National	POLAND		240				
	DFG	GERMANY	C			44	10	
	National	GERMANY		22	5			
	NDS	POLAND		240				
	National	CZECH REPUBLIC		40				
	National	LATVIA		5				
	National	CZECH REPUBLIC	C			80		
	National	BULGARIA		5,0				
	National	LITHUANIA		5				
	National	SLOVENIA		22	5	44	10	

#### Predicted No Effect Concentration (PNEC) values

	PNEC Limit	Exposure Route	Exposure Frequency	Remark
benzyl alcohol CAS: 100-51-6	1 mg/l	Fresh Water		
	0,1 mg/l	Marine water		
	5,27 mg/kg	Freshwater sediments		
	0,527 mg/kg	Marine water sediments		
	39 mg/l	Microorganisms in sewage treatments		
	0,45 mg/kg	Soil		
	2,3 mg/l	Intermittent release		
formaldehyde, polymer with benzenamine, hydrogenated CAS: 135108-88-2	1,5 mg/kg	Marine water sediments		
	1,8 mg/kg	Soil		
	1,9 mg/l	Microorganisms in sewage treatments		
	15 mg/kg	Freshwater sediments		
	0,015 mg/l	Fresh Water		
	0,002 mg/l	Marine water		

#### Derived No Effect Level. (DNEL)

	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
benzyl alcohol CAS: 100-51-6			20 mg/kg	Human Oral		Short Term, systemic effects
			4 mg/kg	Human Oral		Long Term, systemic effects
	110 mg/m3		27 mg/m3	Human Inhalation		Short Term, systemic effects
	22 mg/m3		5,4 mg/m3	Human Inhalation		Long Term, systemic effects
	40 mg/kg		20 mg/kg	Human Dermal		Short Term, systemic effects
	8 mg/kg		4 mg/kg	Human Dermal		Long Term, systemic effects
formaldehyde, polymer with benzenamine, hydrogenated CAS: 135108-88-2	2 mg/kg			Human Dermal		Long Term, systemic effects
	2 mg/m3			Human Inhalation		Short Term, systemic effects
	0,2 mg/m3			Human Inhalation		Long Term, systemic effects
	6 mg/kg			Human Dermal		Short Term, systemic effects
2,4,6-tris (dimethylaminomethyl) phenol CAS: 90-72-2	0,31 mg/m3			Human Inhalation		Long Term, systemic effects

## 8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Nitrile rubber - NBR: thickness  $\geq 0,35\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Butyl rubber - IIR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Fluorinated rubber - FKM: thickness  $\geq 0,4\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to appropriate EN standards, like EN 136, 140, 143, 149, 14387 for information on selection and use of appropriate respiratory protection equipment.

Use adequate protective respiratory equipment.

Hygienic and Technical measures

Not available

Appropriate engineering controls:

Not available

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: liquid

Color: Amber

Odour: ammonia

Odour threshold: Not available  
Melting point / freezing point: Not available  
Initial boiling point and boiling range: 200 °C (392 °F)  
Flammability: N.A.  
Upper/lower flammability or explosive limits: Not available  
Flash point: 100 °C (212 °F)  
Auto-ignition temperature: Not available  
Decomposition temperature: Not available  
pH: Not available  
Viscosity: 220.00 cPs  
Kinematic viscosity: Not available  
Solubility in water: partly soluble  
Solubility in oil: soluble  
Partition coefficient (n-octanol/water): Not available  
Vapour pressure: Not available  
Relative density: Not available  
Vapour density: Not available

**Particle characteristics:**

Particle size: Not available

**9.2. Other information**

Miscibility: Not available  
Conductivity: Not available  
No other relevant information

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**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Stable under normal conditions

**10.2. Chemical stability**

Stable under normal conditions

**10.3. Possibility of hazardous reactions**

None.

**10.4. Conditions to avoid**

Stable under normal conditions.

**10.5. Incompatible materials**

None in particular.

**10.6. Hazardous decomposition products**

None.

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**SECTION 11: Toxicological information**

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

**Toxicological information of the mixture:**

a) acute toxicity	The product is classified: Acute Tox. 4(H302), Acute Tox. 4(H332) ATEmix - Oral : 545.848 mg/kg bw LD50 Oral = 1150, mg/kg LC50 Inhalation Mist > 3, mg/l LD50 Skin > 2000, mg/kg
b) skin corrosion/irritation	The product is classified: Skin Corr. 1C(H314)
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
d) respiratory or skin sensitisation	The product is classified: Skin Sens. 1(H317)
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i) STOT-repeated exposure	The product is classified: STOT RE 2(H373)

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

**Toxicological information on main components of the mixture:**

benzyl alcohol	a) acute toxicity	LC50 Inhalation Rat = 11, mg/l 4h LD50 Oral Rat = 1230, mg/kg
	g) reproductive toxicity	NOAEL Rat = 1072, mg/m3
formaldehyde, polymer with benzenamine, hydrogenated	a) acute toxicity	LD50 Oral Rat = 300, mg/kg
	i) STOT-repeated exposure	LD50 Skin Rabbit > 2000, mg/kg No Observed Adverse Effect Level Oral Rat = 15, mg/kg
N,N'-BIS(3-AMINOPROPYL) ETHYLENEDIAMINE	a) acute toxicity	LD50 Oral Rat = 1200, mg/kg
		LD50 Skin Rabbit = 300, mg/kg
		LD50 Oral Rat = 1200 mg/kg
2,4,6-tris (dimethylaminomethyl) phenol	a) acute toxicity	LD50 Oral Rat = 2169 mg/kg
		LD50 Skin Rat > 1, ml/kg
N-(2-AMINOETHYL)-1,3-PROPANEDIAMINE	a) acute toxicity	LD50 Skin Rabbit = 184, mg/kg

**11.2 Information on other hazards****Endocrine disrupting properties:**No endocrine disruptor substances present in concentration  $\geq 0.1\%$ **SECTION 12: Ecological information****12.1. Toxicity**

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

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

**List of Eco-Toxicological properties of the product**

The product is classified: Aquatic Chronic 3(H412)

**List of components with eco-toxicological properties**

Component	Ident. Numb.	Ecotox Infos
benzyl alcohol	CAS: 100-51-6 - EINECS: 202-859-9 - INDEX: 603-057-00-5	a) Aquatic acute toxicity : EC50 Daphnia = 230 mg/L 48
		a) Aquatic acute toxicity : LC50 Fish = 770 mg/L 1
		a) Aquatic acute toxicity : EC50 Algae = 770 mg/L 72
		a) Aquatic acute toxicity : LC50 Fish = 460 mg/L 96
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 460 mg/L 96h EPA
formaldehyde, polymer with benzenamine, hydrogenated	CAS: 135108-88-2 - EINECS: 603-894-6	a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata = 63 mg/L 96h ECHA
		a) Aquatic acute toxicity : EC50 Daphnia = 15,4 mg/L 48h
		a) Aquatic acute toxicity : EC50 Algae = 43,94 mg/L 72h

2,4,6-  
tris(dimethylaminomethyl)phenol

CAS: 90-72-2 -  
EINECS: 202-  
013-9 - INDEX:  
603-069-00-0

a) Aquatic acute toxicity : LC50 Fish = 175 mg/L 96h

a) Aquatic acute toxicity : EC50 Algae = 46,7 mg/L 72h

a) Aquatic acute toxicity : NOEC Algae = 25,1 mg/L 72h

N-(2-AMINOETHYL)-1,3-  
PROPANEDIAMINE

CAS: 13531-52-  
7 - EINECS:  
236-882-0

a) Aquatic acute toxicity : EC50 Daphnia = 25,93 mg/L 48h

## 12.2. Persistence and degradability

### Component

### Persistence/Degradability:

formaldehyde, polymer with  
benzenamine, hydrogenated

Non-readily biodegradable

## 12.3. Bioaccumulative potential

N.A.

## 12.4. Mobility in soil

N.A.

## 12.5. Results of PBT and vPvB assessment

No PBT, vPvB or endocrine disruptor substances  
present in concentration  $\geq 0.1\%$ .

## 12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration  $\geq 0.1\%$

## 12.7 Other adverse effects

Not available

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage. Contact and send to an authorized waste disposal service.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Hazardous waste: Yes

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

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## SECTION 14: Transport information

### 14.1. UN number or ID number

2735

### 14.2. UN proper shipping name

ADR-Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (cycloaliphatic amines - tertiary amines)

IATA-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. (cycloaliphatic amines - tertiary amines)

IMDG-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. (cycloaliphatic amines - tertiary amines)

### 14.3. Transport hazard class(es)

ADR-Class: 8

IATA-Class: 8



IMDG-Class: 8

#### **14.4. Packing group**

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

#### **14.5. Environmental hazards**

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: F-A, S-B

#### **14.6. Special precautions for user**

Road and Rail ( ADR-RID ) :

ADR-Label: 8

ADR-Hazard identification number: 80

ADR-Special Provisions: 274

ADR-Transport category (Tunnel restriction code): 3 (E)

Air ( IATA ) :

IATA-Passenger Aircraft: 852

IATA-Cargo Aircraft: 856

IATA-Label: 8

IATA-Subsidiary hazards: -

IATA-Erg: 8L

IATA-Special Provisioning: A3 A803

Sea ( IMDG ) :

IMDG-Stowage Code: Category A

IMDG-Stowage Note: SG35 SGG18

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 223 274

IMDG-EMS: F-A, S-B

#### **14.7. Maritime transport in bulk according to IMO instruments**

Not Applicable

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### **SECTION 15: Regulatory information**

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

VOC (2004/42/EC) : 60 (A+B) g/l

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) n. 2020/878

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Provisions related to directive EU 2012/18 (Seveso III):

None

**Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:**

Restrictions related to the product: 3

Restrictions related to the substances contained: 75

#### SVHC Substances:

SVHC substances not present in a concentration  $\geq 0.1\%$  (w/w)

#### German Water Hazard Class (WGK)

Class 3: extremely hazardous.

#### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

### SECTION 16: Other information

Code	Description
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
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.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs (kidneys) through prolonged or repeated exposure if swallowed.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.1/2/Dermal	Acute Tox. 2	Acute toxicity (dermal), Category 2
3.1/3/Dermal	Acute Tox. 3	Acute toxicity (dermal), Category 3
3.1/3/Oral	Acute Tox. 3	Acute toxicity (oral), Category 3
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1A	Skin Corr. 1A	Skin corrosion, Category 1A
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/1C	Skin Corr. 1C	Skin corrosion, Category 1C
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
3.9/2	STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

#### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
3.1/4/Oral	Calculation method
3.3/1	Calculation method
3.9/2	Calculation method
4.1/C3	Calculation method
3.1/4/Inhal	Calculation method
3.2/1C	Calculation method
3.4.2/1	Calculation method

If appropriate, specific provisions in relation to possible training for workers are mentioned in section 2. Any training related to safety in the workplace must in any case refer to a risk assessment that must be carried out by a company safety officer taking into account the specific operating and environmental conditions in which the products are used.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: KAFH

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LDLo: Leathal Dose Low

N.A.: Not Applicable

N/A: Not Applicable

N/D: Not defined/ Not available

NA: Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration.

PSG: Passengers

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

vPvB: Very Persistent, Very Bioaccumulative.

WGK: German Water Hazard Class.

**\* Sheet model entirely changed in compliance to regulatory update.**