

**Safety Data Sheet**  
**SILANCOLOR PITTURA PLUS**

Safety Data Sheet dated: 12/08/2020 - version 3



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

**1.1. Product identifier**

Mixture identification:

Trade name: SILANCOLOR PITTURA PLUS

Trade code: 907J9990

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

Recommended use: Water dispersion synthetic resin based paint

Uses advised against: N.A.

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

Company: MAPEI U.K. Ltd - Mapei House Steel Park Road

Halesowen - West Midlands B62 8HD

www.mapei.co.uk (office hour 8:30-17:30)

Responsible: sicurezza@mapei.it

**1.4. Emergency telephone number**

call NHS 111 or a doctor/OHES Environmental Ltd +44(0)1684 299 886

phone: +44(0)121 508 6970 - fax: +44(0)121 5086 960

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

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

Aquatic Chronic 3 Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

**2.2. Label elements**

**Hazard statements:**

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements:**

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with applicable regulations.

**Special Provisions:**

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH208 Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H - isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

EUH208 Contains 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.

EUH208 Contains terbutryn. May produce an allergic reaction.

EUH208 Contains zinc pyrithione. May produce an allergic reaction.

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

None

**2.3. Other hazards**

No PBT/vPvB Ingredients are present

Other Hazards: No other hazards

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

**3.1. Substances**

N.A.

**3.2. Mixtures**

Mixture identification: SILANCOLOR PITTURA PLUS

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

Concentration (% w/w)	Name	Ident. Numb.	Classification	Registration Number
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≥0.1 - <0.25 %	polyethylene glycol monooleylether	CAS:9004-98-2 EC:500-016-2	Skin Irrit. 2, H315; Aquatic Acute 1, H400
≥0.1 - <0.25 %	zinc pyrithione	CAS:13463-41-7 EC:236-671-3	Acute Tox. 3, H301; Acute Tox. 3, H331; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:10, M-Acute:100
≥0.01 - <0.016 %	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS:2634-33-5 EC:220-120-9 Index:613-088-00-6	Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Acute 1, H400; Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 2, H411
≥0.005 - <0.01 %	terbutryn	CAS:886-50-0 EC:212-950-5	Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Sens. 1B, H317, M-Chronic:100, M-Acute:100
≥0.005 - <0.01 %	2-octyl-2H-isothiazol-3-one	CAS:26530-20-1 EC:247-761-7 Index:613-112-00-5	Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 1, H410; Acute Tox. 3, H311; Acute Tox. 3, H331; Skin Corr. 1B, H314; Aquatic Acute 1, H400, M-Acute:10, M:1
≥0.0015 - <0.005 %	formaldehyde	CAS:50-00-0 EC:200-001-8 Index:605-001-00-5	Acute Tox. 3, H311; Acute Tox. 3, H331; Acute Tox. 3, H301; Skin Corr. 1B, H314; Skin Sens. 1, H317; Muta. 2, H341; Carc. 1B, H350
<0.0015 %	reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	CAS:55965-84-9 EC:611-341-5 Index:613-167-00-5	Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 3, H301; Skin Corr. 1C, H314; Skin Sens. 1A, H317; Acute Tox. 2, H310; Acute Tox. 2, H330; Eye Dam. 1, H318, M-Chronic:100, M-Acute:100

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

N.A.

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

Treatment: N.A.

(see paragraph 4.1)

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

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.

## SECTION 6: Accidental release measures

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

Wear personal protection equipment.

Remove persons to safety.

### 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.

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

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour Note	
2-octyl-2H-isothiazol-3-one	DFG	GERMANY	C			54	10		
	National	GERMANY		0.05					
	CHE	SWITZERLAND				0.1			
	National	SLOVENIA		0.05		0.05			
	DFG	GERMANY	C			0.1			
formaldehyde	National	SLOVENIA		0.05		0.1			
	ACGIH	None	C				0.3	DSEN, RSEN, A2 - URT and eye irr	
	DFG	GERMANY	C			0.74	0.6		
	ACGIH				0.1		0.3	A1 - Confirmed Human Carcinogen; eye and upper respiratory tract irritation; upper respiratory tract cancer; dermal sensitizer; respiratory sensitizer	
	National	SWEDEN		0.37	0.3				
	National	FRANCE					1		
	National	SPAIN			0.37	0.3	0.74	0.6	
	National	GREECE			2.5	2	2.5	2	
	National	DENMARK	C				0.4	0.3	

National FINLAND		0.37	0.3		
National FINLAND	C			1.2	1
National GERMANY		0.37	0.3		
National NORWAY		0.6	0.5		
National NORWAY	C			1.2	1
NDS POLAND		0.37			
NDSch POLAND				0.74	
CHE SWITZERLAND				0.74	0.6
NDS NETHERLANDS		0.15		0.5	
National CZECH REPUBLIC		0.5			
National HUNGARY		0.6		0.6	
Malaysi a OEL MALAYSIA	C			0.37	0.3
National PORTUGAL	C				0.3
National ESTONIA		0.6	0.5	1.2	1
National LATVIA		0.5			
National CZECH REPUBLIC	C			1	
National SLOVAKIA	C			0.74	
National SLOVAKIA		0.37	0.3		
National SLOVENIA		0.62	0.5	0.62	0.5
National UNITED KINGDOM		2.5	2	2.5	2
National BULGARIA		1.0		2.0	
National ROMANIA		1.2	1	3	2
National LITHUANIA		0.6	0.5		
National LITHUANIA	C			1.2	1
National CROATIA		2.5	2	2.5	2
EU		0.37	0.3		Binding

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

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency	Remark
formaldehyde	50-00-0	0.47 mg/l	Fresh Water		
		0.47 mg/l	Marine water		
		4.7 mg/l	Intermittent release		
		0.19 mg/l	Microorganisms in sewage treatments		
		2.44 mg/kg	Freshwater sediments		
		2.44 mg/kg	Marine water sediments		
		0.21 mg/kg	Soil		

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

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
formaldehyde	50-00-0	1 mg/m3			Human Inhalation		Short Term, local effects
		240 mg/kg		102 mg/kg	Human Dermal		Long Term, systemic effects
		9 mg/m3		3.2 mg/m3	Human Inhalation		Long Term, systemic effects
		0.037 mg/cm2		0.012 mg/cm2	Human Dermal		Long Term, local effects

0.5 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>	Human Inhalation	Long Term, local effects
	4.1 mg/kg	Human Oral	Long Term, systemic effects

## 8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

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

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

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

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

Hygienic and Technical measures

N.A.

Appropriate engineering controls:

N.A.

## SECTION 9: Physical and chemical properties

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

Physical state: Liquid

Appearance and colour: paste various

Odour: Characteristic

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: N.A.

Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: N.A.

Solubility in water: partly soluble

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: 40,000.00 cPs

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

### 9.2. Other information

No additional information

## 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 toxicological effects

#### Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

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

polyethylene glycol monooleylether	a) acute toxicity	LD50 Oral Rat 2700 mg/kg  LD50 Oral Rat = 2700 mg/kg
zinc pyrithione	a) acute toxicity	LD50 Skin Rabbit = 100 mg/kg LD50 Oral Rat = 177 mg/kg LC50 Inhalation Rat 0.05 mg/l 4h LD50 Skin Rabbit = 100 mg/kg
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	a) acute toxicity	LD50 Oral Rat = 1020 mg/kg
terbutryn	a) acute toxicity	LD50 Skin Rabbit > 10200 mg/kg LC50 Inhalation Rat > 8 g/m <sup>3</sup> 4h LD50 Oral Rat = 2045 mg/kg LD50 Skin Rabbit > 10200 mg/kg
2-octyl-2H-isothiazol-3-one	a) acute toxicity	LD50 Oral Rat = 318 mg/kg  LD50 Skin Rabbit = 311 mg/kg LC50 Inhalation Rat = 0.58 mg/l 4h LD50 Skin Rabbit = 690 mg/kg LD50 Oral Rat = 550 mg/kg
formaldehyde	a) acute toxicity	LD50 Oral Rat = 700 mg/kg LC50 Inhalation Rat = 0.578 mg/l LD50 Skin Rabbit = 270 mg/kg LD50 Skin Rabbit = 270 mg/kg LC50 Inhalation Rat = 0.578 mg/l 4h LD50 Oral Rat = 100 mg/kg
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	a) acute toxicity	LD50 Oral Rat = 457 mg/kg   LC50 Inhalation Rat = 2.36 mg/l 4h LD50 Skin Rabbit = 660 mg/kg LD50 Oral Rat = 53 mg/kg

**If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.**

a) acute toxicity

- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- Toxicological kinetics, metabolism and distribution information
- i) STOT-repeated exposure
- j) aspiration hazard

## 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 components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
zinc pyrithione	CAS: 13463-41-7 - INDEX: 236-671-3	G : LD50 Avian <i>Colinus virginianus</i> = 64 mg/kg NZ_CCID
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS: 2634-33-5 - EINECS: 613-088-00-6 - INDEX: 220-120-9	a) Aquatic acute toxicity : LC50 Fish = 2.15000 mg/L  b) Aquatic chronic toxicity : NOEC Algae = 0.04030 mg/L 72h b) Aquatic chronic toxicity : EC50 Algae = 0.11000 mg/L 72h b) Aquatic chronic toxicity : EC10 Algae = 0.04000 mg/L 72h b) Aquatic chronic toxicity : EC50 Daphnia = 3.27000 mg/L 48h NOEC Daphnia = 1.20000 mg/L 21d
terbutryn	CAS: 886-50-0 - INDEX: 212-950-5	a) Aquatic acute toxicity : EC50 Daphnia = 6.4 mg/L 48  a) Aquatic acute toxicity : EC50 Algae = 0.0067 mg/L 72 a) Aquatic acute toxicity : LC50 Fish = 1.9 mg/L 96 b) Aquatic chronic toxicity : NOEC Daphnia = 0.05 mg/L - 21d b) Aquatic chronic toxicity : NOEC Fish = 0.073 mg/L - 28d
2-octyl-2H-isothiazol-3-one	CAS: 26530-20-1 - EINECS: 613-112-00-5 - INDEX: 247-761-7	a) Aquatic acute toxicity : EC50 Daphnia = 0.42 mg/L 48  a) Aquatic acute toxicity : EC50 Algae = 0.084 mg/L 72 a) Aquatic acute toxicity : LC50 Fish = 0.036 mg/L 96 a) Aquatic acute toxicity : LC50 Fish = 0.18 mg/L 96 b) Aquatic chronic toxicity : NOEC Daphnia = 0.002 mg/L - 21 d b) Aquatic chronic toxicity : NOEC Fish = 0.022 mg/L - 28 d b) Aquatic chronic toxicity : NOEC Algae = 0.004 mg/L 72
formaldehyde	CAS: 50-00-0 - EINECS: 605-001-00-5 - INDEX: 200-001-8	a) Aquatic acute toxicity : LC50 Fish = 41 mg/L 96  a) Aquatic acute toxicity : EC50 Daphnia = 42 mg/L 24 a) Aquatic acute toxicity : LC50 Fish <i>Pimephales promelas</i> 22.6 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish <i>Lepomis macrochirus</i> = 1510 µg/L 96h EPA  a) Aquatic acute toxicity : LC50 Fish <i>Brachydanio rerio</i> = 41 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish <i>Oncorhynchus mykiss</i> 0.032 mL/L 96h

EPA

a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 100 mg/L 96h EPA

a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 23.2 mg/L 96h EPA

a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 2 mg/L 48h IUCLID

a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 11.3 mg/L 48h EPA

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)  
CAS: 55965-84-9 - EINECS: 613-167-00-5 - INDEX: 611-341-5

a) Aquatic acute toxicity : EC50 Daphnia = 0.12 mg/L 48

a) Aquatic acute toxicity : LC50 Fish = 0.22 mg/L 96

a) Aquatic acute toxicity : EC50 Algae = 0.048 mg/L 72

b) Aquatic chronic toxicity : NOEC Algae = 0.0012 mg/L 72

b) Aquatic chronic toxicity : NOEC Fish = 0.098 mg/L - 28 d

b) Aquatic chronic toxicity : NOEC Daphnia = 0.004 mg/L - 21 d

## 12.2. Persistence and degradability

N.A.

## 12.3. Bioaccumulative potential

N.A.

## 12.4. Mobility in soil

N.A.

## 12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

## 12.6. Other adverse effects

N.A.

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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

Not classified as dangerous in the meaning of transport regulations.

### 14.1. UN number

N.A.

### 14.2. UN proper shipping name

N.A.

### 14.3. Transport hazard class(es)

N.A.



#### 14.4. Packing group

N.A.

#### 14.5. Environmental hazards

N.A.

#### 14.6. Special precautions for user

N.A.

Road and Rail (ADR-RID) :

N.A.

Air (IATA) :

N.A.

Sea (IMDG) :

N.A.

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

N.A.

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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) : 28 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) 2015/830

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

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

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

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

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. 2018/1480 (ATP 13 CLP)

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

N.A.

#### German Water Hazard Class (WGK)

N.A.

#### 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, 40

Restrictions related to the substances contained: 28

#### SVHC Substances:

No data available

MAL-kode: 1-3 (1993)

#### 15.2. Chemical safety assessment

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

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### SECTION 16: Other information

Code	Description
H301	Toxic if swallowed.
H311	Toxic 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.

H331	Toxic if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.1/3/Dermal	Acute Tox. 3	Acute toxicity (dermal), Category 3
3.1/3/Inhal	Acute Tox. 3	Acute toxicity (inhalation), Category 3
3.1/3/Oral	Acute Tox. 3	Acute toxicity (oral), Category 3
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.5/2	Muta. 2	Germ cell mutagenicity, Category 2
3.6/1B	Carc. 1B	Carcinogenicity, Category 1B
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1
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**

4.1/C3      Calculation method

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 Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

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  
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.

**Paragraphs modified from the previous revision:**

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 13. DISPOSAL CONSIDERATIONS
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION