

**Safety Data Sheet**  
**KERAQUICK S1**

Safety Data Sheet dated: 13/08/2019 - version 2



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

**1.1. Product identifier**

Mixture identification:

Trade name: KERAQUICK S1

Trade code: 9001251

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

Recommended use: Cement based powder adhesive

Uses advised against: Data not available

**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)**

Eye Irrit. 2 Causes serious eye irritation.

Skin Sens. 1B 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**



Warning

**Hazard statements:**

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

**Precautionary statements:**

P261 Avoid breathing dust.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P337+P313 If eye irritation persists: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

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

**Contains:**

Portland cement, Cr(VI) < 2 ppm

**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

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

N.A.

### 3.2. Mixtures

Mixture identification: KERAQUICK S1

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

Quantity	Name	Ident. Numb.	Classification	Registration Number
≥50 - <75 %	free crystalline silica ( $\emptyset >10 \mu$ )	CAS:14808-60-7 EC:238-878-4		
≥1 - <2.5 %	Portland cement, Cr(VI) < 2 ppm	CAS:65997-15-1 EC:266-043-4	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Dam. 1, H318; STOT SE 3, H335	
<0.0015 %	free crystalline silica ( $\emptyset <10 \mu$ )	CAS:14808-60-7 EC:238-878-4	STOT RE 2, H373	
<0.0015 %	methanol	CAS:67-56-1 EC:200-659-6 Index:603-001-00-X	Flam. Liq. 2, H225; STOT SE 1, H370; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331	01-2119433307-44-XXXX
<0.0015 %	vinyl acetate	CAS:108-05-4 EC:203-545-4	Flam. Liq. 2, H225; Acute Tox. 4, H332; STOT SE 3, H335; Carc. 2, H351; Aquatic Chronic 3, H412	01-2119471301-50-XXXX

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

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:

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

Eye irritation

Eye damages

### 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)

## 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.

Burning produces heavy smoke.

### 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

---

## 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

---

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m <sup>3</sup>	Long Term ppm	Short Term mg/m <sup>3</sup>	Short Term ppm	Behaviour	Note
free crystalline silica (Ø >10 µ)	National	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	0,1						UK, respirable crystalline
	National	SWEDEN	0,100						SWEDEN, respirable aerosol
	National	NORWAY	0,300						NORWAY, K 7
	NDS	POLAND	2,000						frakcja wdychalna
	NDS	POLAND	0,3						frakcja respirabilna
	National	NORWAY	0,300			0,600			DENMARK, inhalable aerosol inhalable aerosol
National	NORWAY	0,100			0,200			DENMARK, respirable aerosol respirable aerosol	

	SUVA	SWITZERLAN D	0,15		
Portland cement, Cr(VI) < 2 ppm	National	FINLAND	5		FINLAND, inhalerbar damm
	National	FINLAND	1		FINLAND, respirabel fraktion
	NDS	POLAND	6		frakcja wdychalna
	NDS	POLAND	2		frakcja respirabilna
	SUVA	SWITZERLAN D	5		
	ACGIH		1		
	National	SPAIN	4		
	National	FINLAND	5		
	National	FINLAND	1		
	National	PORTUGAL	10		
	National	BELGIUM	10		
	NDS	POLAND	6		
	NDS	POLAND	2		
	National	HUNGARY	10		
	Malaysi a OEL	MALAYSIA	10		
	National	LATVIA	6		
	National	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10		inhalable dust
	National	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	4,000		respirable dust
	National	CROATIA	10	10	
	ACGIH		1		A4 - Not Classifiable as a Human Carcinogen; pulmonary function;respiratory symptoms;asthma
Malaysi a OEL	MALAYSIA	10		5 mg/m3 TWA (containing <1% of free Silica, respirable dust);10 mg/m3 TWA (containing <1% of free Silica, total dust)	
National	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10	30		
National	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10	12		
National	UNITED KINGDOM OF	4	30		

GREAT  
BRITAIN AND  
NORTHERN  
IRELAND

	National ROMANIA		10					
	National CROATIA		10					
	National CROATIA		4					
free crystalline silica ( $\emptyset < 10 \mu$ )	National SWEDEN		0,1					SWEDEN, respirable aerosol
	National NORWAY		0,3					NORWAY, K 7
	NDS POLAND		2					frakcja wdychalna
	NDS POLAND		0,3					frakcja respirabilna
	National NORWAY		0,3		0,6			DENMARK, inhalable aerosol inhalable aerosol
	National NORWAY		0,1		0,2			DENMARK, respirable aerosol respirable aerosol
	EU NNN		0,1					A2 (R) - Pulm fibrosis, lung cancer
	ACGIH NNN		0,025					(R), A2 - Pulm fibrosis, lung cancer
methanol	SUVA NNN		260	200	1040	800		
	National SWEDEN		250	200	350	250		SWEDEN, Short-term value, 15 minutes average value
	National FINLAND		270	200	330	250		FINLAND, hud
	National NORWAY		130	100				NORWAY, H
	NDS NNN		100					
	NDSCh NNN		300					
	National NORWAY		260	200	520	400		
	ACGIH NNN			200		250		Skin, BEI - Headache, eye dam, dizziness, nausea
	DFG GERMANY C				260	200		
	ACGIH			200		250		Skin - potential significant contribution to overall exposure by the cutaneous route; eye damage; headache; dizziness; nausea
	National SWEDEN		250	200				
	EU		260	200			Indicative	Possibility of significant uptake through the skin
	National FRANCE		260	200	1300	1000		
	National SPAIN		266	200				
	National GREECE		260	200	325	250		
	National DENMARK		260	200				
	National FINLAND		270	200	330	250		
	National GERMANY		270	200				
	National PORTUGAL		260	200		250		
	National NORWAY		130	100	162,5	125		
	National BELGIUM		266	200	333	250		
	NDS POLAND		100					

	NDSCh	POLAND			300		
	CHE	SWITZERLAND			1040	800	
	NDS	NETHERLANDS	133				
	National	CZECHIA	250				
	National	HUNGARY	260				
	Malaysian OEL	MALAYSIA	262	200			Skin notation
	National	ESTONIA	250	200	350	250	
	National	LATVIA	260	200			
	National	CZECHIA C			1000		
	National	SLOVAKIA	260	200			
	National	SLOVENIA	260	200			
	National	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	266	200	333	250	
	National	BULGARIA	260,0	200			
	National	ROMANIA	260	200			
	TUR	TURKEY	260	200			
	National	LITHUANIA	260	200			
	National	CROATIA	260	200			
vinyl acetate	NDS	POLAND	10				
	National	SWEDEN	18	5	35	10	SWEDEN, Short-term value, 15 minutes average value
	National	FINLAND	18	5	35	10	
	National	NORWAY	17,6	5	35,2	10	NORWAY, K
	NDSCh	POLAND	30				
	National	NORWAY	30	10	60	20	
	ACGIH	NNN		10		15	A3 - URT, eye and skin irr, CNS impair
	ACGIH			10		15	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans; CNS impairment; eye, skin and upper respiratory tract irritation
	National	SWEDEN	18	5			
	National	FRANCE	17,6	5	35,2	10	
	National	SPAIN	17,6	5	35,2	10	
	National	GREECE	17,6	5	35,2	10	
	National	DENMARK	18	5			
	National	GERMANY	18	5			
	National	PORTUGAL	17,6	5	35,2	10	
	National	NORWAY	17,6	5	35,2	10	
	National	BELGIUM	17,6	5	35,2	10	
	NDSCh	POLAND			30		
	CHE	SWITZERLAND			35	10	
	NDS	NETHERLAND	18		36		

S

National CZECHIA		18			
National HUNGARY		17,6		35,2	
Malaysi a OEL	MALAYSIA	35	10		
National ESTONIA		18	5	35,2	10
National LATVIA		17,6	5	35,2	10
National CZECHIA	C			36	
National SLOVAKIA	C			35,2	
National SLOVAKIA		36	10		
National SLOVENIA		17,6	5	35,2	10
National UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND		17,6	5	35,2	10
National BULGARIA		17,6	5	35,2	10
National ROMANIA		17,6	5	35,2	10
TUR TURKEY		17,6	5	35,2	10
National LITHUANIA		17,6	5	35,2	10
National CROATIA		17,6	5	35,2	10
EU		17,6	5	35,2	10

Indicative

**Biological Exposure Index**

CAS-No.	Component	Value	UoM	Medium	Biological Indicator	Sampling Period
67-56-1	methanol	15	mg/L	Urine	Methyl alcohol	End of turn

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

Component	CAS-No.	PNEC LIMIT	Exposure Route	Exposure Frequency	Remark
vinyl acetate	108-05-4	0,016	Fresh Water		
		mg/l			
		0,0016	Marine water		
		mg/l			
		0,126	Intermittent release		
0,067	Freshwater sediments				
0,067	mg/kg				
0,0067	Marine water sediments				
0,0067	mg/kg				
0,0035	Soil				
0,0035	mg/kg				

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

Component	CAS-No.	Worker Industr y	Worker Profess ional	Consu mer	Exposure Route	Exposure Frequency	Remark
vinyl acetate	108-05-4		0,42		Human Dermal		Long Term, systemic effects
			mg/kg				
			35,2		Human Inhalation		Short Term, systemic effects
			mg/m3				
			35,2		Human Inhalation		Short Term, local effects
	mg/m3						
	17,6		Human Inhalation		Long Term, systemic effects		
	mg/m3						
	17,6		Human Inhalation		Long Term, local effects		
	mg/m3						

**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 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 374 for gloves and EN 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

Appearance and colour: Powder white/grey

Odour: slight, typical of cement

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.

Apparent density: 1.5

Solubility in water:  $< 5\text{ g/l}$

Partition coefficient (n-octanol/water): N.A. - This product is a mixture

Auto-ignition temperature: N.A. - No explosive or spontaneous ignition in contact with air at room temperature

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: == - No components with explosive properties

Oxidizing properties: N.A. - No component with oxidizing properties

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.

---

## 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:

free crystalline silica ( $\emptyset$ >10 $\mu$ )	a) acute toxicity	LD50 Oral > 2000 mg/kg LD50 Skin > 2000 mg/kg
free crystalline silica ( $\emptyset$ <10 $\mu$ )	a) acute toxicity	LD50 Oral Rat = 500 mg/kg
methanol	a) acute toxicity	LC50 Inhalation Rat = 22500 ppm 8h LD50 Oral Rat = 6200 mg/kg LD50 Skin Rabbit = 15840 mg/kg
vinyl acetate	a) acute toxicity	LD50 Oral Rat = 3500 mg/kg LD50 Skin Rabbit = 7440 mg/kg LC50 Inhalation Rat = 15,8 mg/l 4h LD50 Skin Rabbit = 2335 mg/kg LC50 Inhalation Rat = 3680 ppm 4h LD50 Oral Rat = 2900 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
- k) 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:

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

Quantity	Component	Ident. Numb.	Ecotox Infos
<0.0015 %	methanol	CAS: 67-56-1 - EINECS: 200- 659-6 - INDEX: 603-001-00-X	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 28200 mg/L 96h EPA  a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 19500 mg/L 96h EPA  a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 18 mL/L 96h EPA  a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 13500 mg/L 96h EPA

<0.0015 % vinyl acetate

CAS: 108-05-4 - a) Aquatic acute toxicity : EC50 Daphnia = 12,6 mg/L 48  
EINECS: 203-545-4

d) Terrestrial toxicity : LC50 Worm Eisenia foetida > 1 mg/cm<sup>2</sup> 48h IUCLID

a) Aquatic acute toxicity : LC50 Fish Pimephales promelas > 100 mg/L 96h EPA

a) Aquatic acute toxicity : EC50 Algae = 7,48 mg/L 72

b) Aquatic chronic toxicity : NOEC Fish = 0,551 mg/L - 34 d

a) Aquatic acute toxicity : NOEC Daphnia = 4,77 mg/L 48

a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 14 mg/L 96h EPA

a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 15,04 mg/L 96h EPA

a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata 26,1 mg/L 96h EPA

## 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.

---

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

---

## 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.

---

## SECTION 15: Regulatory information

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

VOC (2004/42/EC) : N.A. 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. 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)

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

N.A.

### German Water Hazard Class.

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: 69

### SVHC Substances:

No Data Available

### 15.2. Chemical safety assessment

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

---

## SECTION 16: Other information

Code	Description
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer .
H370	Causes damage to organs .
H373	May cause damage to organs through prolonged or repeated exposure .
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2
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
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B

3.6/2	Carc. 2	Carcinogenicity, Category 2
3.8/1	STOT SE 1	Specific target organ toxicity — single exposure, Category 1
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
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**

3.3/2	Calculation method
3.4.2/1B	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

VOC: 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

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:**

- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 8: Exposure controls/personal protection
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 15: Regulatory information
- SECTION 16: Other information