

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 1 of 25

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

##### 1.1. Product identifier

Ceramic-Polymer SF/LF Part B

UFI: 9TWT-W9XU-TK3Y-86RE

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

###### **Use of the substance/mixture**

Coatings and paints, fillers, putties, thinners

###### **Uses advised against**

No information available.

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

Company name: Chesterton International GmbH

Street: Am Lenzenfleck 23

Place: D-85737 Ismaning GERMANY

Telephone: +49 89 99 65 46 - 0

Telefax: +49 89 99 65 46 - 50

e-mail: eu-sds@chesterton.com

e-mail (Contact person): eu-sds@chesterton.com

Internet: www.chesterton.com

Responsible Department: eu-sds@chesterton.com

##### 1.4. Emergency telephone

+49(0) 551 - 1 92 40 (GIZ-Nord, 24h)

##### number:

#### SECTION 2: Hazards identification

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

###### **Regulation (EC) No 1272/2008**

Skin Corr. 1; H314

Eye Dam. 1; H318

Skin Sens. 1; H317

Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

##### 2.2. Label elements

###### **Regulation (EC) No 1272/2008**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 2 of 25

#### Hazard components for labelling

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia  
Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine  
Phenol, styrenated  
Hydrocarbons, C9-unsaturated, polymerized  
3-aminomethyl-3,5,5-trimethylcyclohexylamine  
m-phenylenebis(methylamine)  
Phenol, methylstyrenated  
2,4,6-tris(dimethylaminomethyl)phenol  
3-aminopropyltriethoxysilane

**Signal word:** Danger

#### Pictograms:



#### Hazard statements

H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash hands thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
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/doctor.  
P501 Dispose of contents/container to an appropriate recycling or disposal facility.

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 3 of 25

#### Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification (Regulation (EC) No 1272/2008)	
9046-10-0	Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia	30 - < 35 %
	618-561-0	01-2119557899-12
	Skin Corr. 1, Aquatic Chronic 3; H314 H412	
186321-96-0	Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	15 - < 20 %
	606-078-8	01-2119983521-35
	Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H315 H318 H317 H400 H410	
100-51-6	benzyl alcohol	5 - < 10 %
	202-859-9	603-057-00-5
	01-2119492630-38	
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H332 H302 H319	
61788-44-1	Phenol, styrenated	1 - < 5 %
	262-975-0	01-2119980970-27
	Skin Irrit. 2, Skin Sens. 1A, Aquatic Chronic 2; H315 H317 H411	
71302-83-5	Hydrocarbons, C9-unsaturated, polymerized	1 - < 5 %
	Skin Sens. 1, Aquatic Chronic 3; H317 H412	
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	1 - < 5 %
	220-666-8	612-067-00-9
	01-2119514687-32	
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1A, Aquatic Chronic 3; H312 H302 H314 H318 H317 H412	
1477-55-0	m-phenylenebis(methylamine)	1 - < 5 %
	216-032-5	01-2119480150-50
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1, Eye Dam. 1, Skin Sens. 1, Aquatic Chronic 3; H332 H302 H314 H318 H317 H412 EUH071	
68512-30-1	Phenol, methylstyrenated	1 - < 5 %
	270-966-8	01-2119555274-38
	Skin Irrit. 2, Skin Sens. 1B, Aquatic Chronic 3; H315 H317 H412	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	1 - < 5 %
	202-013-9	603-069-00-0
	01-2119560597-27	
	Acute Tox. 4, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1; H302 H314 H318 H317	
919-30-2	3-aminopropyltriethoxysilane	< 1 %
	213-048-4	612-108-00-0
	01-2119480479-24	
	Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1; H302 H314 H317	

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 4 of 25

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
9046-10-0	618-561-0	Reaction products of di-, tri- and tetra-propoxylyated propane-1,2-diol with ammonia	30 - < 35 %
		dermal: LD50 = 2979,7 mg/kg; oral: LD50 = 2885,3 mg/kg	
186321-96-0	606-078-8	Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	15 - < 20 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg	
100-51-6	202-859-9	benzyl alcohol	5 - < 10 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: LC50 = >4,178 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 1580 mg/kg	
61788-44-1	262-975-0	Phenol, styrenated	1 - < 5 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg	
2855-13-2	220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine	1 - < 5 %
		inhalation: LC50 = >5,01 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: ATE 1030 mg/kg Skin Sens. 1A; H317: >= 0,001 - 100	
1477-55-0	216-032-5	m-phenylenebis(methylamine)	1 - < 5 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: LC50 = 1,34 mg/l (dusts or mists); dermal: LD50 = > 3100 mg/kg; oral: LD50 = 930 mg/kg	
68512-30-1	270-966-8	Phenol, methylstyrenated	1 - < 5 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg	
90-72-2	202-013-9	2,4,6-tris(dimethylaminomethyl)phenol	1 - < 5 %
		oral: LD50 = 2169 mg/kg	
919-30-2	213-048-4	3-aminopropyltriethoxysilane	< 1 %
		oral: LD50 = 1780 mg/kg	

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

###### General information

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

###### After inhalation

In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still.

###### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Seek medical advice immediately. Do not wash with: Solvents/Thinner

###### After contact with eyes

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

Remove contact lenses, if present and easy to do. Continue rinsing.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 5 of 25

#### **After ingestion**

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Let 1 glass of water be drunken in little sips (dilution effect).

Do NOT induce vomiting.

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

Immediate medical treatment required because corrosive injuries that are not treated are hard to cure. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

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

First Aid, decontamination, treatment of symptoms.  
After contact with skin, wash immediately with plenty of Lutrol.

### SECTION 5: Firefighting measures

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

##### **Suitable extinguishing media**

- alcohol resistant foam
- Water spray jet
- Carbon dioxide (CO<sub>2</sub>)
- Dry extinguishing powder

##### **Unsuitable extinguishing media**

Full water jet

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

In case of fire may be liberated:

- Carbon monoxide
- Carbon dioxide
- Nitrogen oxides (NO<sub>x</sub>)

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

Co-ordinate fire-fighting measures to the fire surroundings.  
In case of fire: Wear self-contained breathing apparatus.

Special protective equipment for firefighters: Protective clothing.

#### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.  
Dispose of waste according to applicable legislation.

Use water spray jet to protect personnel and to cool endangered containers.

### SECTION 6: Accidental release measures

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 6 of 25

#### General advice

- Remove persons to safety.
- Provide adequate ventilation.
- Safe handling: see section 7
- Personal protection equipment: see section 8

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Cover drains. Adverse environmental effects

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

##### For containment

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

#### 6.4. Reference to other sections

- Safe handling: see section 7
- Personal protection equipment: see section 8
- Disposal: see section 13

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

##### Advice on safe handling

- Personal protection equipment: see section 8
- Keep container tightly closed.

##### Advice on protection against fire and explosion

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

##### Advice on general occupational hygiene

Avoid contact with skin, eyes and clothes. Use protective skin cream before handling the product. Remove contaminated, saturated clothing immediately. When using do not eat, drink, smoke, sniff. Wash hands and face before breaks and after work and take a shower if necessary.

##### Further information on handling

Wash hands before breaks and after work. Only wear fitting, comfortable and clean protective clothing. Used working clothes should not be worn outside the work area. Street clothing should be stored separately from work clothing.

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

##### Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep/Store only in original container.

##### Hints on joint storage

- Keep away from:
  - Food and feedingstuffs
  - Oxidising agent

##### Further information on storage conditions

- Keep away from:
  - Frost

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 7 of 25

- Heat
- Humidity

#### **7.3. Specific end use(s)**

No information available.

### SECTION 8: Exposure controls/personal protection

#### **8.1. Control parameters**

##### Occupational exposure limits

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
1477-55-0	m-Xylene alpha,alpha'-diamine (m-phenylenebis(methylamine))	-	0.1		TWA (8 h)	

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 8 of 25

#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
9046-10-0	Reaction products of di-, tri- and tetra-propoxylyated propane-1,2-diol with ammonia			
Consumer DNEL, long-term		inhalation	systemic	1,36 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	2,5 mg/kg bw/day
186321-96-0	Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine			
Worker DNEL, long-term		inhalation	systemic	7,05 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	1 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,74 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	0,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,5 mg/kg bw/day
100-51-6	benzyl alcohol			
Worker DNEL, long-term		inhalation	systemic	22 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	systemic	110 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	8 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	40 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	5,4 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	systemic	27 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	4 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	20 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	4 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	20 mg/kg bw/day
61788-44-1	Phenol, styrenated			
Worker DNEL, long-term		inhalation	systemic	7,4 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	2,1 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,31 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	0,75 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,75 mg/kg bw/day
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine			
Consumer DNEL, acute		oral	systemic	0,3 mg/kg bw/day



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 9 of 25

Worker DNEL, long-term	inhalation	local	0,073 mg/m <sup>3</sup>
Worker DNEL, acute	inhalation	local	0,073 mg/m <sup>3</sup>
Consumer DNEL, long-term	oral	systemic	0,3 mg/kg bw/day
1477-55-0	m-phenylenebis(methylamine)		
Worker DNEL, long-term	dermal	systemic	0,33 mg/kg bw/day
Worker DNEL, long-term	inhalation	local	0,2 mg/m <sup>3</sup>
Worker DNEL, long-term	inhalation	systemic	1,2 mg/m <sup>3</sup>
68512-30-1	Phenol, methylstyrenated		
Worker DNEL, long-term	inhalation	systemic	1,41 mg/m <sup>3</sup>
Worker DNEL, long-term	dermal	systemic	3,5 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,348 mg/m <sup>3</sup>
Consumer DNEL, long-term	dermal	systemic	1,67 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,2 mg/kg bw/day
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol		
Worker DNEL, long-term	inhalation	systemic	0,53 mg/m <sup>3</sup>
Worker DNEL, acute	inhalation	systemic	2,1 mg/m <sup>3</sup>
Worker DNEL, long-term	dermal	systemic	0,15 mg/kg bw/day
Worker DNEL, acute	dermal	systemic	0,6 mg/kg bw/day
Consumer DNEL, long-term	dermal	systemic	0,075 mg/kg bw/day
Consumer DNEL, acute	dermal	systemic	0,075 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,075 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,13 mg/m <sup>3</sup>
Consumer DNEL, acute	inhalation	systemic	0,13 mg/m <sup>3</sup>
919-30-2	3-aminopropyltriethoxysilane		
Consumer DNEL, long-term	oral	systemic	1 mg/kg bw/day
Worker DNEL, long-term	inhalation	systemic	14 mg/m <sup>3</sup>
Worker DNEL, acute	inhalation	systemic	59 mg/m <sup>3</sup>
Worker DNEL, long-term	dermal	systemic	2 mg/kg bw/day
Worker DNEL, acute	dermal	systemic	8,3 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	3,5 mg/m <sup>3</sup>
Consumer DNEL, acute	inhalation	systemic	17,4 mg/m <sup>3</sup>
Consumer DNEL, long-term	dermal	systemic	1 mg/kg bw/day

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 10 of 25

Consumer DNEL, acute	dermal	systemic	5 mg/kg bw/day
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## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 11 of 25

#### PNEC values

CAS No	Substance	Value
Environmental compartment		Value
9046-10-0	Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia	
Freshwater		0,015 mg/l
Marine water		0,014 mg/l
Freshwater sediment		0,132 mg/kg
Marine sediment		0,125 mg/kg
Secondary poisoning		6,93 mg/kg
Soil		0,018 mg/kg
186321-96-0	Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	
Freshwater		0,000186 mg/l
Freshwater (intermittent releases)		0,00186 mg/l
Marine water		0,000019 mg/l
Freshwater sediment		0,005 mg/kg
Marine sediment		0,0005 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,58 mg/l
Soil		11,1 mg/kg
100-51-6	benzyl alcohol	
Freshwater		1 mg/l
Freshwater (intermittent releases)		2,3 mg/l
Marine water		0,1 mg/l
Freshwater sediment		5,27 mg/kg
Marine sediment		0,527 mg/kg
Micro-organisms in sewage treatment plants (STP)		39 mg/l
Soil		0,456 mg/kg
61788-44-1	Phenol, styrenated	
Freshwater		0,004 mg/l
Freshwater (intermittent releases)		0,046 mg/l
Marine water		0,0004 mg/l
Freshwater sediment		0,248 mg/kg
Marine sediment		0,0248 mg/kg
Micro-organisms in sewage treatment plants (STP)		36,2 mg/l
Soil		0,0473 mg/kg
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 12 of 25

Freshwater	0,06 mg/l
Freshwater (intermittent releases)	0,23 mg/l
Marine water	0,006 mg/l
Freshwater sediment	5,784 mg/kg
Marine sediment	0,578 mg/kg
Micro-organisms in sewage treatment plants (STP)	3,18 mg/l
Soil	1,121 mg/kg
<b>1477-55-0</b>	<b>m-phenylenebis(methylamine)</b>
Freshwater	0,094 mg/l
Freshwater (intermittent releases)	0,152 mg/l
Marine water	0,009 mg/l
Freshwater sediment	12,4 mg/kg
Marine sediment	1,24 mg/kg
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	2,44 mg/kg
<b>68512-30-1</b>	<b>Phenol, methylstyrenated</b>
Freshwater	0,014 mg/l
Freshwater (intermittent releases)	0,14 mg/l
Marine water	0,0014 mg/l
Freshwater sediment	1064 mg/kg
Marine sediment	106,4 mg/kg
Secondary poisoning	8,89 mg/kg
Micro-organisms in sewage treatment plants (STP)	2,4 mg/l
Soil	212,2 mg/kg
<b>90-72-2</b>	<b>2,4,6-tris(dimethylaminomethyl)phenol</b>
Freshwater	0,046 mg/l
Freshwater (intermittent releases)	0,46 mg/l
Marine water	0,005 mg/l
Freshwater sediment	0,262 mg/kg
Marine sediment	0,026 mg/kg
Micro-organisms in sewage treatment plants (STP)	0,2 mg/l
Soil	0,025 mg/kg
<b>919-30-2</b>	<b>3-aminopropyltriethoxysilane</b>
Freshwater	0,5 mg/l
Freshwater (intermittent releases)	2,05 mg/l
Marine water	0,05 mg/l

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 13 of 25

Freshwater sediment	1,8 mg/kg
Marine sediment	0,18 mg/kg
Micro-organisms in sewage treatment plants (STP)	1,3 mg/l
Soil	0,069 mg/kg

#### 8.2. Exposure controls

##### Appropriate engineering controls

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

##### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Suitable eye protection:

- Eye glasses with side protection
- goggles

##### Hand protection

Tested protective gloves must be worn: EN ISO 374

NBR (Nitrile rubber),

Wearing time with permanent contact: Thickness of the glove material:  $\geq 0,4$  mm, Breakthrough time:  $>480$  min

Wearing time with occasional contact (splashes): Thickness of the glove material:  $\geq 0,1$  mm, Breakthrough time:  $> 30$  min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Breakthrough times and swelling properties of the material must be taken into consideration.

##### Skin protection

Protective clothing

##### Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Combination filtering device A-P3

Self-contained respirator (breathing apparatus)

##### Thermal hazards

No data available

##### Environmental exposure controls

Do not allow to enter into surface water or drains.

## SECTION 9: Physical and chemical properties

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

Physical state:	Liquid	
Colour:	yellow-brown	
Odour:	characteristic	
Melting point/freezing point:		No data available

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 14 of 25

Boiling point or initial boiling point and boiling range:	No data available
Flammability	
Solid/liquid:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Flash point:	> 85 °C
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH-Value:	No data available
Water solubility:	No data available
Solubility in other solvents	
No information available.	
Partition coefficient n-octanol/water:	No data available
Vapour pressure:	No data available
Density (at 20 °C):	~ 1,15 g/cm <sup>3</sup>
Relative vapour density:	No data available

#### 9.2. Other information

##### Information with regard to physical hazard classes

Explosive properties  
No information available.

Self-ignition temperature

Solid:

No data available

Gas:

No data available

Oxidizing properties

No information available.

##### Other safety characteristics

Evaporation rate:

No data available

Sublimation point:

No data available

Softening point:

No data available

Pour point:

No data available

Viscosity / dynamic:  
(at 20 °C)

+6500 mPa·s

##### Further Information

No information available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

### 10.2. Chemical stability

The substance is chemically stable under recommended conditions of storage, use and temperature.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 15 of 25

#### **10.3. Possibility of hazardous reactions**

Exothermic reaction with:

- Acid,
- Oxidising agent

#### **10.4. Conditions to avoid**

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

#### **10.5. Incompatible materials**

- Acid,
- Oxidising agent

#### **10.6. Hazardous decomposition products**

Does not decompose when used for intended uses. No known hazardous decomposition products.

### **SECTION 11: Toxicological information**

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

##### **Acute toxicity**

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

##### **ATEmix calculated**

ATE (oral) 6695,0 mg/kg; ATE (dermal) 31791,9 mg/kg; ATE (inhalation vapour) 113,54 mg/l; ATE (inhalation dust/mist) 14,972 mg/l

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 16 of 25

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
9046-10-0	Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia				
	oral	LD50 2885,3 mg/kg	Rat	Study report (1993)	OECD Guideline 401
	dermal	LD50 2979,7 mg/kg	Rabbit	Study report (1993)	OECD Guideline 402
186321-96-0	Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine				
	oral	LD50 >2000 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rat		
100-51-6	benzyl alcohol				
	oral	LD50 1580 mg/kg	Mouse	Cosmet. Toxicol. 11, 1011-1013 (1973) (1)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rabbit	Raw Material Data Handbook, Vol.1:( Orga	EPA OTS 798.1100
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) dust/mist	LC50 >4,178 mg/l	Rat	ECHA	OECD 403
61788-44-1	Phenol, styrenated				
	oral	LD50 > 2000 mg/kg	Rat	Study report (2014)	OECD Guideline 423
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2014)	OECD Guideline 402
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine				
	oral	ATE 1030 mg/kg			
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2010)	OECD Guideline 402
	inhalation (4 h) dust/mist	LC50 >5,01 mg/l	Rat		
1477-55-0	m-phenylenebis(methylamine)				
	oral	LD50 930 mg/kg	Rat	Study report (1973)	OECD Guideline 401
	dermal	LD50 > 3100 mg/kg	Rat	Study report (1975)	TK 11813 was applied to a shaved area of
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) dust/mist	LC50 1,34 mg/l	Rat		
68512-30-1	Phenol, methylstyrenated				



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 17 of 25

	oral	LD50 mg/kg	> 2000	Rat	Study report (1994)	OECD Guideline 401
	dermal	LD50 mg/kg	> 2000	Rat	Study report (2009)	OECD Guideline 402
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol					
	oral	LD50 mg/kg	2169	Rat	Study report (1992)	OECD Guideline 401
919-30-2	3-aminopropyltriethoxysilane					
	oral	LD50 mg/kg	1780	Rat	Study report (1956)	Only limited details of the method are g

#### Irritation and corrosivity

Causes severe skin burns and eye damage.  
Causes serious eye damage.

#### Sensitising effects

May cause an allergic skin reaction. (Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine; Phenol, styrenated; Hydrocarbons, C9-unsaturated, polymerized; 3-aminomethyl-3,5,5-trimethylcyclohexylamine; m-phenylenebis(methylamine); Phenol, methylstyrenated; 2,4,6-tris(dimethylaminomethyl)phenol; 3-aminopropyltriethoxysilane)

#### Carcinogenic/mutagenic/toxic effects for reproduction

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

#### STOT-single exposure

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

#### STOT-repeated exposure

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

#### Aspiration hazard

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

### 11.2. Information on other hazards

#### Endocrine disrupting properties

No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

Toxic to aquatic life with long lasting effects.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 18 of 25

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
9046-10-0	Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia					
	Acute fish toxicity	LC50 > 15 mg/l	96 h	Oncorhynchus mykiss	Study report (2010)	OECD Guideline 203
	Acute algae toxicity	ErC50 15 mg/l	72 h	Pseudokirchneriella subcapitata	Study report (2010)	EU Method C.3
	Acute crustacea toxicity	EC50 418,34 mg/l	48 h	other aquatic crustacea: Acartia tonsa	Study report (2005)	other: ISO TC147/SC5
	Acute bacteria toxicity	(EC50 mg/l) 750	3 h	activated sludge of a predominantly domestic sewage	Study report (2010)	OECD Guideline 209
186321-96-0	Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine					
	Acute fish toxicity	LC50 1,806 mg/l	96 h	Oncorhynchus mykiss	Study report (2013)	OECD Guideline 203
	Acute algae toxicity	ErC50 0,77 mg/l	72 h	Raphidocelis subcapitata	Study report (2013)	OECD Guideline 201
	Acute crustacea toxicity	EC50 0,705 mg/l	48 h	Daphnia magna	Study report (2013)	OECD Guideline 202
	Acute bacteria toxicity	(EC50 mg/l) 157,6	3 h	activated sludge, domestic	Study report (2013)	OECD Guideline 209
100-51-6	benzyl alcohol					
	Acute fish toxicity	LC50 > 100 mg/l	96 h	Oryzias latipes	Review article or handbook (2009)	OECD Guideline 203
	Acute algae toxicity	ErC50 770 mg/l	72 h	Raphidocelis subcapitata	Review article or handbook (2009)	OECD Guideline 201
	Acute crustacea toxicity	EC50 230 mg/l	48 h	Daphnia magna	Review article or handbook (2009)	OECD Guideline 202
	Fish toxicity	NOEC 48,897 mg/l	30 d	Fish species	<a href="http://epa.gov/oppt/exposure/pubs/episui">http://epa.gov/oppt/exposure/pubs/episui</a>	other: QSAR
	Algae toxicity	NOEC 51 mg/l	3 d			
	Crustacea toxicity	NOEC 51 mg/l	21 d	Daphnia magna	Review article or handbook (2009)	OECD Guideline 211
	Acute bacteria toxicity	(EC50 mg/l) 1385	3 h	activated sludge, domestic	Study report (1989)	OECD Guideline 209
61788-44-1	Phenol, styrenated					
	Acute fish toxicity	LC50 5,6 mg/l	96 h		REACH Registration Dossier	other: Refer below principle

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 19 of 25

	Acute algae toxicity	ErC50 mg/l	20,42	72 h	Chlorella vulgaris	REACH Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50	4,6 mg/l	48 h	Daphnia magna	REACH Registration Dossier	OECD Guideline 202
	Fish toxicity	NOEC mg/l	0,0618	63 d	Danio rerio	REACH Registration Dossier	other: OECD 234 Fish Sexual Development
	Crustacea toxicity	NOEC	0,2 mg/l	21 d	Daphnia magna	REACH Registration Dossier	other: Refer below principle
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine						
	Acute fish toxicity	LC50	110 mg/l	96 h	Leuciscus idus	REACH Registration Dossier	EU Method C.1
	Acute algae toxicity	ErC50	37 mg/l	72 h	Desmodesmus subspicatus	REACH Registration Dossier	EU Method C.3
	Acute crustacea toxicity	EC50	23 mg/l	48 h	Daphnia magna	REACH Registration Dossier	OECD Guideline 202
	Crustacea toxicity	NOEC	3 mg/l	21 d	Daphnia magna	REACH Registration Dossier	other: OECD 202, part 2
1477-55-0	m-phenylenebis(methylamine)						
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Oncorhynchus mykiss	REACH Registration Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50	12 mg/l	72 h	Desmodesmus subspicatus	REACH Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	15,2	48 h	Daphnia magna (Big water flea)		
	Crustacea toxicity	NOEC	4,7 mg/l	21 d	Daphnia magna	REACH Registration Dossier	OECD Guideline 211
	Acute bacteria toxicity	(EC50 mg/l)	> 1000	0,5 h	Activated sludge from laboratory wastewater plant	Study report (2004)	OECD Guideline 209
68512-30-1	Phenol, methylstyrenated						
	Acute fish toxicity	LL50 mg/l	25,8	96 h	Danio rerio	REACH Registration Dossier	OECD Guideline 203

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 20 of 25

	Acute algae toxicity	ErC50	15 mg/l	72 h	Desmodesmus subspicatus	REACH Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EL50	14 mg/l	48 h	Daphnia magna	REACH Registration Dossier	OECD Guideline 202
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol						
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Cyprinus carpio	REACH Registration Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	46,7	72 h	Raphidocelis subcapitata	REACH Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna	REACH Registration Dossier	OECD Guideline 202
919-30-2	3-aminopropyltriethoxysilane						
	Acute fish toxicity	LC50 mg/l	> 934	96 h	Danio rerio	REACH Registration Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	> 1000	72 h	Desmodesmus subspicatus	REACH Registration Dossier	EU Method C.3
	Acute crustacea toxicity	EC50	331 mg/l	48 h	Daphnia magna	REACH Registration Dossier	OECD Guideline 202
	Crustacea toxicity	NOEC mg/l	>= 1	21 d	Daphnia magna	REACH Registration Dossier	The study consisted of triplicate runs o
	Acute bacteria toxicity	(EC50 mg/l)	180	3 h	activated sludge of a predominantly domestic sewage	Study report (2013)	OECD Guideline 209

### 12.2. Persistence and degradability

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 21 of 25

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
100-51-6	benzyl alcohol			
	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	95 - 97%	21	
	Readily biodegradable (according to OECD criteria).			
61788-44-1	Phenol, styrenated			
	OECD 301F	7%	28	
	Not readily biodegradable (according to OECD criteria)			
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine			
	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	8 %	28	
	Not readily biodegradable (according to OECD criteria)			
1477-55-0	m-phenylenebis(methylamine)			
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	49 %	28	
	Not readily biodegradable (according to OECD criteria)			
919-30-2	3-aminopropyltriethoxysilane			
		68	28	

### 12.3. Bioaccumulative potential

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
9046-10-0	Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia	1,34
186321-96-0	Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	3,38
100-51-6	benzyl alcohol	1
61788-44-1	Phenol, styrenated	3,03
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	0,99
1477-55-0	m-phenylenebis(methylamine)	ca. 0,18
68512-30-1	Phenol, methylstyrenated	3,627
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	>= 0,219
919-30-2	3-aminopropyltriethoxysilane	1,7

#### BCF

CAS No	Chemical name	BCF	Species	Source
100-51-6	benzyl alcohol	1,371	QSAR model	<a href="http://epa.gov/oppt/">http://epa.gov/oppt/</a>
61788-44-1	Phenol, styrenated	11440		Estimation Programs
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	2,63		REACH Registration D
1477-55-0	m-phenylenebis(methylamine)	3,16	no data	Validated suite of c
68512-30-1	Phenol, methylstyrenated	ca. 0,074	Pimephales promelas	REACH Registration D
919-30-2	3-aminopropyltriethoxysilane	3,4	Cyprinus carpio	REACH Registration D

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 22 of 25

#### **12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### **12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### **12.7. Other adverse effects**

No information available.

### **SECTION 13: Disposal considerations**

#### **13.1. Waste treatment methods**

##### **Disposal recommendations**

Dispose of waste according to applicable legislation.

##### **Contaminated packaging**

Non-contaminated packages may be recycled. Dispose of waste according to applicable legislation.

### **SECTION 14: Transport information**

#### **Land transport (ADR/RID)**

<b><u>14.1. UN number or ID number:</u></b>	UN 2735
<b><u>14.2. UN proper shipping name:</u></b>	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylendiamine (Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups))
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	III
Hazard label:	8
Classification code:	C7
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E

#### **Inland waterways transport (ADN)**

<b><u>14.1. UN number or ID number:</u></b>	UN 2735
<b><u>14.2. UN proper shipping name:</u></b>	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylendiamine (Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups))
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	III
Hazard label:	8
Classification code:	C7
Special Provisions:	274
Limited quantity:	5 L

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 23 of 25

Excepted quantity: E1

#### Marine transport (IMDG)

**14.1. UN number or ID number:** UN 2735  
**14.2. UN proper shipping name:** POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylendiamine (Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups))  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
 Hazard label: 8  
 Special Provisions: 223, 274  
 Limited quantity: 5 L  
 Excepted quantity: E1  
 EmS: F-A, S-B  
 Segregation group: 18 - alkalis

#### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number or ID number:** UN 2735  
**14.2. UN proper shipping name:** POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylendiamine (Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups))  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
 Hazard label: 8  
 Special Provisions: A3 A803  
 Limited quantity Passenger: 1 L  
 Passenger LQ: Y841  
 Excepted quantity: E1  
 IATA-packing instructions - Passenger: 852  
 IATA-max. quantity - Passenger: 5 L  
 IATA-packing instructions - Cargo: 856  
 IATA-max. quantity - Cargo: 60 L

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes  
 Danger releasing substance: Polyoxypropylendiamine (Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups), Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine

#### 14.6. Special precautions for user

No information available.

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

No information available.

### SECTION 15: Regulatory information

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 24 of 25

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

##### **EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3

Information according to 2012/18/EU (SEVESO III): E2 Hazardous to the Aquatic Environment

##### **National regulatory information**

Water hazard class (D): 2 - obviously hazardous to water

#### **15.2. Chemical safety assessment**

For the following substances of this mixture a chemical safety assessment has been carried out:

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia

Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine

benzyl alcohol

Phenol, styrenated

3-aminomethyl-3,5,5-trimethylcyclohexylamine

m-phenylenebis(methylamine)

Phenol, methylstyrenated

2,4,6-tris(dimethylaminomethyl)phenol

3-aminopropyltriethoxysilane

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

##### **Changes**

This data sheet contains changes from the previous version in section(s): 1,7.

##### **Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer

(Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

ICAO: International Civil Aviation Organization

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

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

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

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Ceramic-Polymer SF/LF Part B

Revision date: 18.01.2023

Page 25 of 25

ATE: Acute toxicity estimate  
 LC50: Lethal concentration, 50%  
 LD50: Lethal dose, 50%  
 LL50: Lethal loading, 50%  
 EL50: Effect loading, 50%  
 EC50: Effective Concentration 50%  
 ErC50: Effective Concentration 50%, growth rate  
 NOEC: No Observed Effect Concentration  
 BCF: Bio-concentration factor  
 PBT: persistent, bioaccumulative, toxic  
 vPvB: very persistent, very bioaccumulative  
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
 IBC: Intermediate Bulk Container  
 SVHC: Substance of Very High Concern

#### Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Skin Corr. 1; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 2; H411	Calculation method

#### Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

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