

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 1 of 21

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

1.1. Product identifier

Ceramic-Polymer SF/LF Part B

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:	DE-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 number:

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

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: 17.12.2019

Page 2 of 21

Hazard components for labelling

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

Phenol, styrenated

3-aminomethyl-3,5,5-trimethylcyclohexylamine

m-phenylenebis(methylamine)

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.

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.

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: 17.12.2019

Page 3 of 21

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
9046-10-0	Polyoxypropylendiamine (Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups)			25-30 %
	618-561-0		01-2119557899-12	
	Skin Corr. 1, Aquatic Chronic 2; H314 H411			
186321-96-0	Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine			20-25 %
	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			
61788-44-1	Phenol, styrenated			10-15 %
	262-975-0		01-2119979575-18	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411			
100-51-6	benzyl alcohol			10-15 %
	202-859-9	603-057-00-5	01-2119492630-38	
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H332 H302 H319			
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, Skin Sens. 1, Aquatic Chronic 3; H312 H302 H314 H317 H412			
1477-55-0	m-phenylenebis(methylamine)			1-3 %
	216-032-5		01-2119480150-50	
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1, Skin Sens. 1, Aquatic Chronic 3; H332 H302 H314 H317 H412 EUH071			
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol			1-3 %
	202-013-9	603-069-00-0	01-2119560597-27	
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2; H302 H315 H319			
919-30-2	3-aminopropyltriethoxysilane			< 0,5 %
	213-048-4	612-108-00-0	01-2119480479-24	
	Acute Tox. 4, Skin Corr. 1B; H302 H314			

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

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).

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 4 of 21

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.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

Dry extinguishing powder. Carbon dioxide (CO₂). alcohol resistant foam. Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Carbon monoxide Carbon dioxide (CO₂). Nitrogen oxides (NO_x)

5.3. Advice for firefighters

Special protective equipment for firefighters Protective clothing. In case of fire: Wear self-contained breathing apparatus.

Co-ordinate fire-fighting measures to the fire surroundings.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

Provide adequate ventilation.

Personal protection equipment: see section 8

Remove persons to safety.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 5 of 21

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

Absorb with liquid-binding material (e.g. 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

See protective measures under point 7 and 8.

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

See section 8. Wear personal protection equipment (refer to 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.

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

Heat

Humidity

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 6 of 21

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
9046-10-0	Polyoxypropylendiamine (Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups)			
Worker DNEL, long-term		inhalation	systemic	8,8 mg/m ³
Worker DNEL, long-term		dermal	systemic	2,5 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,6 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,9 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,9 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 ³
Worker DNEL, long-term		dermal	systemic	1 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,74 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,5 mg/kg bw/day
61788-44-1	Phenol, styrenated			
Worker DNEL, long-term		inhalation	systemic	7,4 mg/m ³
Worker DNEL, long-term		dermal	systemic	2,1 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,31 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,75 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,75 mg/kg bw/day
100-51-6	benzyl alcohol			
Worker DNEL, long-term		inhalation	systemic	22 mg/m ³
Worker DNEL, acute		inhalation	systemic	110 mg/m ³
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 ³
Consumer DNEL, acute		inhalation	systemic	27 mg/m ³
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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 7 of 21

2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine		
Worker DNEL, long-term	inhalation	local	0,073 mg/m ³
Worker DNEL, acute	inhalation	local	0,073 mg/m ³
Consumer DNEL, long-term	oral	systemic	0,526 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 ³
Worker DNEL, long-term	inhalation	systemic	1,2 mg/m ³
919-30-2	3-aminopropyltriethoxysilane		
Worker DNEL, long-term	inhalation	systemic	59 mg/m ³
Worker DNEL, acute	inhalation	systemic	59 mg/m ³
Worker DNEL, long-term	dermal	systemic	8,3 mg/kg bw/day
Worker DNEL, acute	dermal	systemic	8,3 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	17,4 mg/m ³
Consumer DNEL, acute	inhalation	systemic	17,4 mg/m ³
Consumer DNEL, long-term	dermal	systemic	5 mg/kg bw/day
Consumer DNEL, acute	dermal	systemic	5 mg/kg bw/day

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 8 of 21

PNEC values

CAS No	Substance	Value
Environmental compartment		Value
9046-10-0	Polyoxypropylendiamine (Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups)	
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
61788-44-1	Phenol, styrenated	
Freshwater		0,03 mg/l
Freshwater (intermittent releases)		0,046 mg/l
Marine water		0,003 mg/l
Freshwater sediment		1,86 mg/kg
Marine sediment		0,186 mg/kg
Micro-organisms in sewage treatment plants (STP)		36,2 mg/l
Soil		0,355 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
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: 17.12.2019

Page 9 of 21

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
1477-55-0	m-phenylenebis(methylamine)
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
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol
Freshwater	0,084 mg/l
Freshwater (intermittent releases)	0,84 mg/l
Marine water	0,008 mg/l
Micro-organisms in sewage treatment plants (STP)	0,2 mg/l
919-30-2	3-aminopropyltriethoxysilane
Freshwater	0,33 mg/l
Freshwater (intermittent releases)	3,3 mg/l
Marine water	0,033 mg/l
Freshwater sediment	1,2 mg/kg
Marine sediment	0,12 mg/kg
Micro-organisms in sewage treatment plants (STP)	13 mg/l
Soil	0,05 mg/kg

8.2. Exposure controls

Appropriate engineering controls

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

Protective and hygiene measures

Work in well-ventilated zones or use proper respiratory protection. Only wear fitting, comfortable and clean protective clothing. Avoid contact with skin, eyes and clothes. Wash hands and face before breaks and after work and take a shower if necessary.

Eye/face protection

Suitable eye protection:

Eye glasses with side protection

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 10 of 21

goggles

Hand protection

Tested protective gloves must be worn: EN ISO 374

NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)

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

Wearing time with occasional contact (splashes):: Thickness of the glove material: $\geq 0,1$ mm, Breakthrough time (maximum wearing 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 (EN 14387) A-P3

Self-contained respirator (breathing apparatus) (DIN EN 133)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	yellow-brown
Odour:	characteristic
pH-Value:	No data available

Changes in the physical state

Melting point:	No data available
Initial boiling point and boiling range:	No data available
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
Flash point:	> 85 °C

Flammability

Solid:	No data available
Gas:	No data available

Explosive properties

No information available.

Lower explosion limits:	No data available
Upper explosion limits:	No data available
Ignition temperature:	No data available

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 11 of 21

Auto-ignition temperature

Solid: No data available
Gas: No data available

Decomposition temperature: No data available

Oxidizing properties

No information available.

Vapour pressure: No data available

Density (at 20 °C): ~1,15 g/cm³

Water solubility: No data available

Solubility in other solvents

No information available.

Partition coefficient: No data available

Viscosity / dynamic:
(at 20 °C) +6500 mPa·s

Vapour density: No data available

Evaporation rate: No data available

9.2. Other 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.

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 toxicological effects

Acute toxicity

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 12 of 21

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
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		
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
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) aerosol	LC50 >4,178 mg/l	Rat	ECHA	OECD 403
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine				
	oral	LD50 1030 mg/kg	Rat	Study report (1965)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2010)	OECD Guideline 402
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) aerosol	LC50 1,34 mg/l	Rat		
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol				
	oral	LD50 2169 mg/kg	Rat	Study report (1992)	OECD Guideline 401
919-30-2	3-aminopropyltriethoxysilane				
	oral	LD50 530 mg/kg	Mouse	Study report (1972)	No details of a guideline and only limit

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 13 of 21

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; 3-aminomethyl-3,5,5-trimethylcyclohexylamine; m-phenylenebis(methylamine))

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.

SECTION 12: Ecological information

12.1. Toxicity

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 14 of 21

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
9046-10-0	Polyoxypropylendiamine (Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups)					
	Acute fish toxicity	LC50 mg/l	10-100	96 h	Supplier	OECD 203
	Acute algae toxicity	ErC50	15 mg/l	72 h	Supplier	OECD 201
	Acute crustacea toxicity	EC50	80 mg/l	48 h	Supplier	OECD 202
	Algae toxicity	NOEC mg/l	0,32	3 d	Supplier	OECD 201
	Acute bacteria toxicity	(750 mg/l)		3 h	Activated sludge Supplier	OECD 209
186321-96-0	Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine					
	Acute fish toxicity	LC50 mg/l	1,806	96 h	Oncorhynchus mykiss Study report (2013)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	0,77	72 h	Pseudokirchneriella subcapitata Study report (2013)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	0,705	48 h	Daphnia magna Study report (2013)	OECD Guideline 202
	Acute bacteria toxicity	(157,6 mg/l)		3 h	activated sludge, domestic Study report (2013)	OECD Guideline 209
61788-44-1	Phenol, styrenated					
	Acute fish toxicity	LC50 mg/l	1,77	96 h	Danio rerio Study report (2010)	OECD Guideline 203
	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	1,9 mg/l	14 d	fish REACH Registration Dossier	other: Refer below principle
	Crustacea toxicity	NOEC	0,2 mg/l	21 d	Daphnia magna REACH Registration Dossier	other: Refer below principle
100-51-6	benzyl alcohol					
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Oryzias latipes Review article or handbook (2009)	OECD Guideline 203
	Acute algae toxicity	ErC50	770 mg/l	72 h	Pseudokirchneriella 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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 15 of 21

	Fish toxicity	NOEC mg/l	48,897	30 d	Fish species	http://epa.gov/oppt/exposure/pubs/episui	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	(1385 mg/l)		3 h	activated sludge, domestic	Study report (1989)	OECD Guideline 209
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine						
	Acute fish toxicity	LC50	110 mg/l	96 h	Leuciscus idus	Study report (1993)	EU Method C.1
	Acute algae toxicity	ErC50	37 mg/l	72 h	Desmodesmus subspicatus	Study report (1993)	EU Method C.3
	Acute crustacea toxicity	EC50	23 mg/l	48 h	Daphnia magna	Study report (2002)	OECD Guideline 202
	Crustacea toxicity	NOEC	3 mg/l	21 d	Daphnia magna	Study report (1993)	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)		
	Acute bacteria toxicity	(> 1000 mg/l)		0,5 h	Activated sludge from laboratory wastewater plant	Study report (2004)	OECD Guideline 209
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol						
	Acute fish toxicity	LC50	175 mg/l	96 h	Cyprinus carpio	Study report (1973)	other: Fish Bioassay Procedure in 1970 e
	Acute algae toxicity	ErC50	84 mg/l	72 h	Desmodesmus subspicatus	Study report (2004)	OECD Guideline 201
919-30-2	3-aminopropyltriethoxysilane						
	Acute fish toxicity	LC50 mg/l	> 934	96 h	Danio rerio	Study report (1994)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	> 1000	72 h	Desmodesmus subspicatus	Study report (1994)	EU Method C.3
	Acute crustacea toxicity	EC50	331 mg/l	48 h	Daphnia magna	Study report (1993)	OECD Guideline 202

12.2. Persistence and degradability

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 16 of 21

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
9046-10-0	Polyoxypropylendiamine (Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups)			
	OECD 301B	0%	28	
	Not readily biodegradable (according to OECD criteria)			
61788-44-1	Phenol, styrenated			
	OECD 301F	7%	28	
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).			
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	Polyoxypropylendiamine (Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups)	<3
186321-96-0	Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	3,38
61788-44-1	Phenol, styrenated	2,415
100-51-6	benzyl alcohol	1
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	0,99
1477-55-0	m-phenylenebis(methylamine)	ca. 0,18
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	>= 0,219
919-30-2	3-aminopropyltriethoxysilane	1,7

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 17 of 21

BCF

CAS No	Chemical name	BCF	Species	Source
9046-10-0	Polyoxypropylendiamine (Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups)	<100		
61788-44-1	Phenol, styrenated	18,21	fish	REACH Registration D
100-51-6	benzyl alcohol	1,371	QSAR model	http://epa.gov/oppt/
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	3,16	QSAR estimate	Other company data (
1477-55-0	m-phenylenebis(methylamine)	3,16	no data	Validated suite of c
919-30-2	3-aminopropyltriethoxysilane	3,4	Cyprinus carpio	Other company data (

12.4. Mobility in soil

No information available.

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. 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)

14.1. UN 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
Classification code:	C7
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 18 of 21

Inland waterways transport (ADN)

14.1. UN 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
Classification code:	C7
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1

Marine transport (IMDG)

14.1. UN 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:	alkalis

Air transport (ICAO-TI/IATA-DGR)

14.1. UN 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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 19 of 21

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

No information available.

SECTION 15: Regulatory information

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: 3-aminopropyltriethoxysilane

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

National regulatory information

Water contaminating class (D): 2 - clearly water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
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
Phenol, styrenated
benzyl alcohol
3-aminomethyl-3,5,5-trimethylcyclohexylamine
m-phenylenebis(methylamine)
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): 3.

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 conernat 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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 20 of 21

IATA-DGR: Dangerous Goods Refulations 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
 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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer SF/LF Part B

Revision date: 17.12.2019

Page 21 of 21

Further Information

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself.
No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose.
The user must make their own determination as to suitability.

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