

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 1 of 21

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

1.1. Product identifier

Ceramic-Polymer NK C5-3 Part B

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

Use of the substance/mixture

Colour

Uses advised against

No data 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:

Flammable liquid: Flam. Liq. 3

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Flammable liquid and vapour.

Harmful if inhaled.

Causes skin irritation.

Causes serious eye damage.

May cause an allergic skin reaction.

May cause respiratory irritation.

2.2. Label elements

Regulation (EC) No. 1272/2008

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 2 of 21

Hazard components for labelling

Hexamethylendiisocyanate, oligomer
2-dimethylaminoethanol; N,N-dimethylethanolamine
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate
dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane

Signal word: Danger

Pictograms:



Hazard statements

H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.

Precautionary statements

P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
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 NK C5-3 Part B

Revision date: 03.04.2020

Page 3 of 21

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
1330-20-7	xylene			25 - < 50 %
	215-535-7	601-022-00-9		
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H332 H312 H315			
28182-81-2	Hexamethylenediisocyanate, oligomer			15 - < 20 %
	500-060-2		01-2119485796-17	
	Acute Tox. 4, Skin Sens. 1, STOT SE 3; H332 H317 H335			
108-65-6	2-methoxy-1-methylethyl acetate			7 - < 10 %
	203-603-9	607-195-00-7	01-2119475791-29	
	Flam. Liq. 3; H226			
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine			3 - < 5 %
	203-542-8	603-047-00-0	01-2119492298-24	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B; H226 H332 H312 H302 H314			
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate			0,15 - 0,25 %
	223-861-6	615-008-00-5	01-2119490408-31	
	Acute Tox. 3, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, Aquatic Chronic 2; H331 H315 H319 H334 H317 H335 H411			
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane			0,1 - 0,15 %
	201-039-8	050-030-00-3	01-2119496068-27	
	Muta. 2, Repr. 1B, Eye Dam. 1, Skin Sens. 1, STOT SE 1, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1; H341 H360FD H318 H317 H370 H372 H400 H410			

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).

After inhalation

Remove casualty to fresh air and keep warm and at rest.
If unconscious place in recovery position and seek medical advice.

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 4 of 21

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

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.

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.

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

6.2. Environmental precautions

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

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 5 of 21

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

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
108-65-6	1-Methoxypropyl acetate	50	274		TWA (8 h)	WEL
		100	548		STEL (15 min)	WEL
108-01-0	2-Dimethylaminoethanol	2	7.4		TWA (8 h)	WEL
		6	22		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 6 of 21

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid (creatinine)	650 mmol/mol	urine	Post shift

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 7 of 21

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
1330-20-7	xylene			
Worker DNEL, long-term		inhalation	local	221 mg/m ³
Consumer DNEL, long-term		inhalation	local	65,3 mg/m ³
Worker DNEL, long-term		inhalation	systemic	221 mg/m ³
Worker DNEL, acute		inhalation	systemic	442 mg/m ³
Worker DNEL, acute		inhalation	local	442 mg/m ³
Worker DNEL, long-term		dermal	systemic	212 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	65,3 mg/m ³
Consumer DNEL, acute		inhalation	systemic	260 mg/m ³
Consumer DNEL, acute		inhalation	local	260 mg/m ³
Consumer DNEL, long-term		dermal	systemic	125 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	12,5 mg/kg bw/day
28182-81-2	Hexamethylendiisocyanate, oligomer			
Worker DNEL, acute		inhalation	local	1 mg/m ³
Worker DNEL, long-term		inhalation	local	0,5 mg/m ³
108-65-6	2-methoxy-1-methylethyl acetate			
Worker DNEL, long-term		inhalation	systemic	275 mg/m ³
Worker DNEL, acute		inhalation	local	550 mg/m ³
Worker DNEL, long-term		dermal	systemic	796 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	33 mg/m ³
Consumer DNEL, long-term		inhalation	local	33 mg/m ³
Consumer DNEL, long-term		dermal	systemic	320 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	36 mg/kg bw/day
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine			
Consumer DNEL, long-term		inhalation	systemic	0,438 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,126 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	1,76 mg/m ³
Worker DNEL, acute		inhalation	systemic	5,28 mg/m ³
Worker DNEL, long-term		inhalation	local	1,76 mg/m ³
Worker DNEL, acute		inhalation	local	13,53 mg/m ³

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 8 of 21

Worker DNEL, long-term	dermal	systemic	0,25 mg/kg bw/day
Worker DNEL, acute	dermal	systemic	1,2 mg/kg bw/day
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate		
Worker DNEL, long-term	inhalation	local	0,045 mg/m ³
Worker DNEL, acute	inhalation	local	0,045 mg/m ³
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane		
Worker DNEL, acute	inhalation	systemic	0,059 mg/m ³
Worker DNEL, long-term	inhalation	systemic	0,02 mg/m ³
Worker DNEL, long-term	dermal	systemic	0,43 mg/kg bw/day
Worker DNEL, acute	dermal	systemic	2,08 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,005 mg/m ³
Consumer DNEL, acute	inhalation	systemic	0,04 mg/m ³
Consumer DNEL, long-term	dermal	systemic	0,16 mg/kg bw/day
Consumer DNEL, acute	dermal	systemic	0,5 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,003 mg/kg bw/day
Consumer DNEL, acute	oral	systemic	0,02 mg/kg bw/day

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 9 of 21

PNEC values

CAS No	Substance		Value
1330-20-7	xylene	Environmental compartment	
		Freshwater	0,327 mg/l
		Freshwater (intermittent releases)	0,327 mg/l
		Marine water	0,327 mg/l
		Freshwater sediment	12,46 mg/kg
		Marine sediment	12,46 mg/kg
		Micro-organisms in sewage treatment plants (STP)	6,58 mg/l
		Soil	2,31 mg/kg
108-65-6	2-methoxy-1-methylethyl acetate		
		Freshwater	0,635 mg/l
		Freshwater (intermittent releases)	6,35 mg/l
		Marine water	0,064 mg/l
		Freshwater sediment	3,29 mg/kg
		Marine sediment	0,329 mg/kg
		Micro-organisms in sewage treatment plants (STP)	100 mg/l
		Soil	0,29 mg/kg
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine		
		Freshwater	0,066 mg/l
		Freshwater (intermittent releases)	0,661 mg/l
		Marine water	0,004 mg/l
		Freshwater sediment	0,246 mg/kg
		Marine sediment	0,015 mg/kg
		Micro-organisms in sewage treatment plants (STP)	10 mg/l
		Soil	0,01 mg/kg
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate		
		Freshwater	0,027 mg/l
		Freshwater (intermittent releases)	0,27 mg/l
		Marine water	0 mg/l
		Freshwater sediment	98,51 mg/kg
		Marine sediment	1,46 mg/kg
		Micro-organisms in sewage treatment plants (STP)	10,6 mg/l
		Soil	19,8 mg/kg
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane		

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 10 of 21

Freshwater	0 mg/l
Freshwater (intermittent releases)	0,005 mg/l
Marine water	0 mg/l
Freshwater sediment	0,05 mg/kg
Marine sediment	0,005 mg/kg
Secondary poisoning	0,2 mg/kg
Micro-organisms in sewage treatment plants (STP)	100 mg/l
Soil	0,041 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.

When using do not eat, drink, smoke, sniff.

Eye/face protection

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) ABEK-P2

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:	various
Odour:	characteristic

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 11 of 21

pH-Value: No data available

Changes in the physical state

Melting point: No data available

Initial boiling point and boiling range: 36 °C

Sublimation point: No data available

Softening point: No data available

Pour point: No data available

Flash point: 30 °C

Flammability

Solid: No data available

Gas: No data available

Explosive properties

not explosive according to EU A.14

Vapours can form explosive mixtures with air.

Lower explosion limits: 1,1

Upper explosion limits: 7

Ignition temperature: 315 °C

Auto-ignition temperature

Solid: No data available

Gas: No data available

Decomposition temperature: No data available

Oxidizing properties

Not oxidising.

Vapour pressure:
(at 20 °C) 6,7 - 8,2 hPa

Density (at 20 °C): 1,038 g/cm³

Water solubility: Immiscible

Solubility in other solvents

No information available.

Partition coefficient: No data available

Viscosity / dynamic: No data available

Viscosity / kinematic:
(at 20 °C) 25 mm²/s

Vapour density: No data available

Evaporation rate: No data available

Solvent content: 36,0

9.2. Other information

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 12 of 21

Solid content:

64,0

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

No information available.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No information available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if inhaled.

ATEmix calculated

ATE (inhalation vapour) 14,88 mg/l; ATE (inhalation aerosol) 2,034 mg/l

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 13 of 21

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
1330-20-7	xylene					
	oral	LD50 mg/kg	3523	Rat	Study report (1986)	EU Method B.1
	dermal	LD50 mg/kg	12126	Rabbit	Publication (1962)	Single dermal dose under occlusion follo
	inhalation (4 h) vapour	LC50	6700 mg/l	Rat	Toxicol Appl Pharmacol 33:543-558. (1975)	EU Method B.2
	inhalation aerosol	ATE	1,5 mg/l			
28182-81-2	Hexamethylendiisocyanate, oligomer					
	oral	LD50 mg/kg	>5000	Rat		
	dermal	LD50 mg/kg	>2000	Rabbit		
	inhalation (4 h) vapour	LC50	1,67 mg/l	Rat		
	inhalation aerosol	ATE	1,5 mg/l			
108-65-6	2-methoxy-1-methylethyl acetate					
	oral	LD50 mg/kg	6190 - 10000	Rat	Study report (1985)	OECD Guideline 401
	dermal	LD50 mg/kg	> 2000	Rat	Study report (1985)	OECD Guideline 402
	inhalation (4 h) aerosol	LC50 mg/l	>23,878	Rat		
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine					
	oral	LD50 mg/kg	1182,7	Rat	Study report (1991)	OECD Guideline 401
	dermal	LD50 mg/kg	1219	Rat	Publication (1996)	OECD Guideline 403
	inhalation (4 h) vapour	LC50	1641 mg/l	Rat	Publication (1996)	OECD Guideline 403
	inhalation aerosol	ATE	1,5 mg/l			
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate					
	oral	LD50 mg/kg	4814	Rat	Study report (1976)	OECD Guideline 401
	dermal	LD50 mg/kg	> 7000	Rat	Study report (1985)	OECD Guideline 402
	inhalation vapour	ATE	3 mg/l			
	inhalation aerosol	ATE	0,5 mg/l			
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane					
	oral	LD50 mg/kg	2071	Rat	Study report (1981)	OECD Guideline 401

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 14 of 21

	dermal	LD50 mg/kg	> 2000	Rat	Study report (2010)	OECD Guideline 402
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Irritation and corrosivity

Causes skin irritation.
Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (Hexamethylendiisocyanate, oligomer;
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate; dibutyltin dilaurate;
dibutyl[bis(dodecanoyloxy)]stannane)

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

May cause respiratory irritation. (Hexamethylendiisocyanate, oligomer)

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 NK C5-3 Part B

Revision date: 03.04.2020

Page 15 of 21

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
1330-20-7	xylene					
	Acute fish toxicity	LC50 8,4 mg/l	96 h	Oncorhynchus mykiss	Ecotoxicology and Environmental Safety.	OECD Guideline 203
	Acute algae toxicity	ErC50 4,9 mg/l	72 h	Pseudokirchneriella subcapitata	Ecotoxicology and Environmental Safety.	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l > 3,4	48 h	Ceriodaphnia dubia	Ecotoxicology and Environmental Safety 3	other: US EPA 600/4-91-003
	Fish toxicity	NOEC mg/l > 1,3	56 d	Oncorhynchus mykiss	Appl. Sci. Branch, Eng. Res. Cent. Denve	Fish were exposed in artificial streams
	Crustacea toxicity	NOEC mg/l 1,17	7 d	Ceriodaphnia dubia	Ecotoxicology and Environmental Safety 3	other: US EPA 600/4-91-003
	Acute bacteria toxicity	(> 175 mg/l)	0,5 h	Activated sludge	Research Journal WPCF 60(10) 1850-1856 (OECD Guideline 209
28182-81-2	Hexamethylenediisocyanate, oligomer					
	Acute fish toxicity	LC50 mg/l >100	96 h	Brachydanio rerio (zebra-fish)		
	Acute algae toxicity	ErC50 mg/l >1000	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 mg/l >100	48 h	Daphnia magna (Big water flea)		
108-65-6	2-methoxy-1-methylethyl acetate					
	Acute fish toxicity	LC50 100 - 180 mg/l	96 h	Oncorhynchus mykiss	Study report (1987)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l > 1000	96 h	Pseudokirchneriella subcapitata	Study report (1986)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l > 500	48 h	Daphnia magna	Study report (1987)	EU Method C.2
	Fish toxicity	NOEC mg/l 47,5	14 d	Oryzias latipes	Study report (1998)	OECD Guideline 204
	Crustacea toxicity	NOEC mg/l >= 100	21 d	Daphnia magna	Study report (1998)	OECD Guideline 211
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine					
	Acute fish toxicity	LC50 mg/l 146,63	96 h	Leuciscus idus	REACH Registration Dossier	other: German industrial standard test g

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 16 of 21

	Acute algae toxicity	ErC50 mg/l	66,08	72 h	Desmodesmus subspicatus	REACH Registration Dossier	Method: other: fluorimetrically determin
	Acute crustacea toxicity	EC50 mg/l	98,37	48 h	Daphnia magna	REACH Registration Dossier	Method: other: Directive 79/831/EEC, Ann
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate						
	Acute fish toxicity	LC50 mg/l	> 208	96 h	Cyprinus carpio	Study report (1996)	EU Method C.1
	Acute algae toxicity	ErC50 mg/l	> 70	72 h	Desmodesmus subspicatus	Study report (2000)	EU Method C.3
	Acute crustacea toxicity	EC50	27 mg/l	48 h	Daphnia magna	Study report (1995)	EU Method C.2
	Acute bacteria toxicity	(263 mg/l)		3 h	activated sludge of a predominantly domestic sewage	Study report (2000)	EU Method C.11
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane						
	Acute fish toxicity	LC50 mg/l	21,2	96 h	Danio rerio	Study report (1998)	OECD Guideline 203
	Acute algae toxicity	ErC50	> 1 mg/l	72 h	Desmodesmus subspicatus	Study report (1999)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	1,7 - 3,4	48 h	Daphnia magna	Study report (1999)	OECD Guideline 202
	Acute bacteria toxicity	(> 1000 mg/l)		3 h	activated sludge of a predominantly domestic sewage	Study report (2010)	OECD Guideline 209

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
1330-20-7	xylene	3,2
108-65-6	2-methoxy-1-methylethyl acetate	1,2
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine	-0,55
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate	0,99
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane	4,44

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 17 of 21

BCF

CAS No	Chemical name	BCF	Species	Source
1330-20-7	xylene	> 5,5 - < 12,2	Oncorhynchus mykiss	Appl. Sci. Branch, E
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine	3,162	Fish, species not reported	The BCFBAF program e
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate	3,16	QSAR estimate	Other company data (
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane	1,49	Carassius carassius	Toxicol. Environ. Ch

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 1263
14.2. UN proper shipping name:	PAINT
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3
Classification code:	F1
Special Provisions:	163 367 650
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	30
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number:	UN 1263
14.2. UN proper shipping name:	Paint

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 18 of 21

<u>14.3. Transport hazard class(es):</u>	3
<u>14.4. Packing group:</u>	III
Hazard label:	3
Classification code:	F1
Special Provisions:	163 367 650
Limited quantity:	5 L
Excepted quantity:	E1

Marine transport (IMDG)

<u>14.1. UN number:</u>	UN 1263
<u>14.2. UN proper shipping name:</u>	PAINT
<u>14.3. Transport hazard class(es):</u>	3
<u>14.4. Packing group:</u>	III
Hazard label:	3
Special Provisions:	163, 223, 367, 955
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number:</u>	UN 1263
<u>14.2. UN proper shipping name:</u>	PAINT
<u>14.3. Transport hazard class(es):</u>	3
<u>14.4. Packing group:</u>	III
Hazard label:	3
Special Provisions:	A3 A72 A192
Limited quantity Passenger:	10 L
Passenger LQ:	Y344
Excepted quantity:	E1
IATA-packing instructions - Passenger:	355
IATA-max. quantity - Passenger:	60 L
IATA-packing instructions - Cargo:	366
IATA-max. quantity - Cargo:	220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 19 of 21

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 30: dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane

2010/75/EU (VOC): 35,96

2004/42/EC (VOC): 35,96

National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of child-bearing age.

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:

xylene

2-methoxy-1-methylethyl acetate

2-dimethylaminoethanol; N,N-dimethylethanolamine

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate

dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane

SECTION 16: Other information

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

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%

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 20 of 21

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
Flam. Liq. 3; H226	On basis of test data
Acute Tox. 4; H332	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
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.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H360FD	May damage fertility. May damage the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
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.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-3 Part B

Revision date: 03.04.2020

Page 21 of 21

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