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 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 30.01.2015 / 0002  
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 Valid from: 30.01.2015  
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(COSMOHYBRID 490)

## Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

#### 1.1 Product identifier

**COSMO HD-100.110**  
**COSMO HD-100.111**  
**COSMO HD-100.112**  
**COSMO HD-100.113**  
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#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

##### Relevant identified uses of the substance or mixture:

Adhesive  
 Assembly material

##### Uses advised against:

No information available at present.

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

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Weiss Chemie + Technik GmbH & Co.KG, Hansastrasse 2, 35708 Haiger, Germany  
 Phone: +49(0)2773/815-0, Fax: ---  
 msds@weiss-chemie.de, www.weiss-chemie.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

#### 1.4 Emergency telephone

##### Emergency information services / official advisory body:

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##### Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (WIC)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### 2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
Eye Irrit.	2	H319-Causes serious eye irritation.
Aquatic	3	H412-Harmful to aquatic life with long lasting effects.
Chronic		

##### 2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments)

The mixture is not classified as dangerous in the terms of the directive 1999/45/EC.

#### 2.2 Label elements

##### 2.2.1 Labeling according to Regulation (EC) 1272/2008 (CLP)



Warning

H319-Causes serious eye irritation. H412-Harmful to aquatic life with long lasting effects.

P280-Wear eye protection.  
 P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313-If eye irritation persists: Get medical advice/attention.

#### 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

### SECTION 3: Composition/information on ingredients

#### 3.1 Substance

n.a.

#### 3.2 Mixture

trimethoxyvinylsilane	
Registration number (REACH)	01-2119513215-52-XXXX
Index	---
EINECS, ELINCS, NLP	220-449-8
CAS	CAS 2768-02-7
content %	1-5
Classification according to Directive 67/548/EEC	Flammable, R10 Harmful, Xn, R20
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 3, H226 Acute Tox. 4, H332

3-(trimethoxysilyl)propylamine	
Registration number (REACH)	--
Index	---
EINECS, ELINCS, NLP	237-511-5
CAS	CAS 13822-56-5
content %	1-<3
Classification according to Directive 67/548/EEC	Irritant, Xi, R38 Irritant, Xi, R41
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Irrit. 2, H315 Eye Dam. 1, H318

bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]butylmalonate	
Registration number (REACH)	01-2119978231-37-XXXX
Index	---
EINECS, ELINCS, NLP	264-513-3
CAS	CAS 63843-89-0
content %	0,025-<0,25
Classification according to Directive 67/548/EEC	Harmful, Xn, R22 Toxic, T, R48/25 Dangerous for the environment, R52 Dangerous for the environment, R53
Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 4, H302 STOT RE 1, H372 Aquatic Chronic 1, H410 (M=10)

For the text of the R-phrases / H-phrases and classification codes (GHS/CLP), see Section 16. The substances named in this section are given with their actual, appropriate classification! For substances that are listed in appendix VI, table 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

Never pour anything into the mouth of an unconscious person!

##### Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

##### Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Unsuitable cleaning product:

Solvent

Thinners

##### Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

##### Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting. Consult doctor immediately.

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

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1. In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

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

n.c.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

CO2

Extinction powder

Water jet spray

Large fire:

Water jet spray / alcohol resistant foam

##### Unsuitable extinguishing media

None known

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

In case of fire the following can develop:

Oxides of carbon

Oxides of sulphur

Toxic gases

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary

Dispose of contaminated extinction water according to official regulations.

### SECTION 6: Accidental release measures

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

Ensure sufficient supply of air.

Avoid contact with eyes or skin.

If applicable, caution - risk of slipping

#### 6.2 Environmental precautions

If leakage occurs, dam up.

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Resolve leaks if this possible without risk.  
 Prevent surface and ground-water infiltration, as well as ground penetration.  
 Prevent from entering drainage system.  
 If accidental entry into drainage system occurs, inform responsible authorities.  
**6.3 Methods and material for containment and cleaning up**  
 Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) and dispose of according to Section 13.

Or:  
 Pick up mechanically and dispose of according to Section 13.  
**6.4 Reference to other sections**  
 For personal protective equipment see Section 8 and for disposal instructions see Section 13.

### SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

#### 7.1 Precautions for safe handling

##### 7.1.1 General recommendations

Ensure good ventilation.  
 Avoid contact with eyes.  
 Avoid long lasting or intensive contact with skin.  
 Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.  
 Observe directions on label and instructions for use.

##### 7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.  
 Wash hands before breaks and at end of work.  
 Keep away from food, drink and animal feedingstuffs.  
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

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

Keep out of access to unauthorised individuals.  
 Store product closed and only in original packaging.  
 Not to be stored in gangways or stair wells.  
 Store cool  
 Store in a dry place.

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

No information available at present.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

The methanol listed below can arise upon contact with water.

Chemical Name	Calcium carbonate	Content %:
WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3 (total inhalable dust)	WEL-STEL: ---	---
BMGV: ---	Other information: ---	

Chemical Name	Methanol	Content %:
WEL-TWA: 200 ppm (266 mg/m3) (WEL), 200 ppm (260 mg/m3) (EU)	WEL-STEL: 250 ppm (333 mg/m3) (WEL)	---
BMGV: ---	Other information: Sk (WEL, EU)	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.  
 \*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

#### trimethoxyvinylsilane

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	0,69	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	4,9	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,69	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	4,9	mg/kg	
	Environment - freshwater		PNEC	0,34	mg/l	
	Environment - marine		PNEC	0,034	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	3,4	mg/l	
	Environment - sewage treatment plant		PNEC	110	mg/l	
Consumer	Human - dermal	Short term, systemic effects	DNEL	26,9	mg/kg bw/day	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	93,4	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,3	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	1,04	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,3	mg/kg bw/day	

	Environment - sediment, freshwater		PNEC	0,27	mg/kg	
	Environment - sediment, marine		PNEC	0,12	mg/kg	
	Environment - soil		PNEC	0,046	mg/kg	

Calcium carbonate						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	10	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	10	mg/m3	
Consumer	Human - oral	Short term, systemic effects	DNEL	6,1	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	6,1	mg/kg bw/day	
	Environment - sewage treatment plant		PNEC	100	mg/l	

Methanol						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	40	mg/kg body weight/day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	260	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	260	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	40	mg/kg body weight/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	260	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	260	mg/m3	
Consumer	Human - dermal	Short term, systemic effects	DNEL	8	mg/kg body weight/day	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	50	mg/m3	
Consumer	Human - oral	Short term, systemic effects	DNEL	8	mg/kg body weight/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	8	mg/kg body weight/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	50	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	8	mg/kg body weight/day	
	Environment - freshwater		PNEC	154	mg/l	
	Environment - marine		PNEC	154	mg/l	
	Environment - sediment, freshwater		PNEC	570,4	mg/kg	
	Environment - sediment, marine		PNEC	57,04	mg/kg	
	Environment - soil		PNEC	23,5	mg/kg	
	Environment - water, sporadic (intermittent) release		PNEC	1540	mg/l	
	Environment - sewage treatment plant		PNEC	100	mg/l	

#### 8.2 Exposure controls

##### 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.  
 If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.  
 Applies only if maximum permissible exposure values are listed here.

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

General hygiene measures for the handling of chemicals are applicable.  
 Wash hands before breaks and at end of work.  
 Keep away from food, drink and animal feedingstuffs.  
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:  
 Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:  
 Chemical resistant protective gloves (EN 374).  
 Recommended  
 Protective nitrile gloves (EN 374)  
 Minimum layer thickness in mm:  
 >= 0,35  
 Permeation time (penetration time) in minutes:  
 >= 120  
 The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions.  
 The recommended maximum wearing time is 50% of breakthrough time.  
 Protective hand cream recommended.

Skin protection - Other:  
 Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)

Respiratory protection:  
 Normally not necessary.

Thermal hazards:

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Not applicable

Additional information on hand protection - No tests have been performed.  
 In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.  
 Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.  
 Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.  
 In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.  
 The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

**8.2.3 Environmental exposure controls**

No information available at present.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

Physical state:	Pastelike, Liquid
Colour:	According to specification
Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	Not determined
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point:	Not determined
Evaporation rate:	n.a.
Flammability (solid, gas):	n.a.
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	~1.6 g/cm <sup>3</sup> (20°C)
Bulk density:	Not determined
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	n.a.
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Product is not explosive.
Oxidising properties:	No

**9.2 Other information**

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined
Metal content:	Not determined
Molar mass:	Not determined
Chemical heat of combustion:	Not determined

**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

The product has not been tested.

**10.2 Chemical stability**

Stable with proper storage and handling.

**10.3 Possibility of hazardous reactions**

reacts with water

**10.4 Conditions to avoid**

See also section 7.

Strong heat

Moisture

**10.5 Incompatible materials**

See also section 7.

None known

**10.6 Hazardous decomposition products**

See also section 5.2

In case of contact with water:

Methanol

**SECTION 11: Toxicological information**

Possibly more information on health effects, see Section 2.1 (classification).

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Toxicity/effect	End point	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.

Acute toxicity, by inhalation:	ATE	>20	mg/l /4h			calculated value, Vapours
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Respiratory tract irritation:						n.d.a.
Repeated dose toxicity:						n.d.a.
Symptoms:						n.d.a.
Other information:						Classification according to calculation procedure.

trimethoxyvinylsilane						
Toxicity/effect	End point	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	7120	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	3540	mg/kg	Rabbit		
Acute toxicity, by inhalation:	LD50	2773	ppm /4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol
Acute toxicity, by inhalation:	LC50	16,8	mg/l /4h	Rat		Vapours
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Slightly irritant
Skin corrosion/irritation:				Rabbit		Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitising
Germ cell mutagenicity:						Negative
Carcinogenicity:						Negative
Reproductive toxicity:						Negative
Repeated dose toxicity:	NOAEL	<62,5	mg/kg	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Development Tox. Screening Test)	
Repeated dose toxicity:	NOAEL	10	mg/l	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Development Tox. Screening Test)	Vapours
Symptoms:						mucous membrane irritation
Symptoms:						drowsiness, dizziness, nausea, abdominal pain, breathing difficulties, visual disturbances
Symptoms:						mucous membrane irritation

3-(trimethoxysilyl)propylamine						
Toxicity/effect	End point	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit		
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:				Rabbit		Irritant
Serious eye damage/irritation:				Rabbit		Intensively irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitising
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative

bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]butylmalonate

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Toxicity/effect	End point	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	1490	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>3170	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	

Calcium carbonate						
Toxicity/effect	End point	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 420 (Acute Oral toxicity - Fixed Dose Procedure)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>3	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Not sensitising
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Carcinogenicity:						No indications of such an effect.
Reproductive toxicity:	NOEL	1000	mg/kg bw/d	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Development Tox. Screening Test)	
Specific target organ toxicity - single exposure (STOT-SE):						No indications of such an effect.
Specific target organ toxicity - repeated exposure (STOT-RE):						No indications of such an effect.
Aspiration hazard:						No
Symptoms:						blood in urine (haematuria), nausea and vomiting.

Methanol						
Toxicity/effect	End point	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD0	143	mg/kg	Human being		
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	IUCLID Chem. Data Sheet (ESIS)	Not relevant for classification.
Acute toxicity, by oral route:	ATE	300	mg/kg	Human being		Experiences on persons.
Acute toxicity, by dermal route:	LD50	17100	mg/kg	Rabbit		Does not conform with EU classification.
Acute toxicity, by inhalation:	LC50	85	mg/l/4h	Rat		Not relevant for classification.
Skin corrosion/irritation:				Rabbit		Mild irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Mild irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitising

Germ cell mutagenicity:						OECD 471 (Bacterial Reverse Mutation Test)	Negative
Symptoms:							abdominal pain, vomiting, headaches, gastrointestinal disturbances, drowsiness, visual disturbances, watering eyes, nausea, mental confusion

## SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

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Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:							n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and degradability:							n.d.a.
Bioaccumulative potential:							n.d.a.
Mobility in soil:							n.d.a.
Results of PBT and vPvB assessment							n.d.a.
Other adverse effects:							n.d.a.

trimethoxyvinylsilane							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	>= 100	mg/l	Brachydanio rerio		
Toxicity to fish:	LC50	96h	191	mg/l	Oncorhynchus mykiss		
Toxicity to fish:	LC50	96h	191	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	EC50	48h	168,7	mg/l	Daphnia magna	Regulation (EC) 440/2008 C.2 (DAPHNIA SP. ACUTE IMMOBILISATION TEST)	
Toxicity to algae:	EC50	72h	>957	mg/l	Scenedesmus subspicatus		
Toxicity to algae:	IC50	72h	>100	mg/l	Selenastrum capricornutum		
Toxicity to algae:	NOEC/NOEL	72h	>957	mg/l	Scenedesmus subspicatus		88/302/EC
Persistence and degradability:		28d	51	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	
Persistence and degradability:		28d				OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
Bioaccumulative potential:			-2				product of hydrolysis @20°C
Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50		>2500	mg/l	activated sludge		

3-(trimethoxysilyl)propylamine							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50		1264	mg/l	Pimephales promelas		
Toxicity to daphnia:	EC50		302	mg/l	Daphnia magna		
Persistence and degradability:							n.d.a.
Toxicity to bacteria:	EC50		3400	mg/l	activated sludge		

bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]butylmalonate

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Toxicity/effect	Endpo int	Ti me	Val ue	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	>1 00	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	LOEC/ LOEL	21d	6,4	µg/l	Daphnia magna		
Toxicity to algae:	EC50	72h	61	mg/l	Scenedesmus subspicatus		
Persistence and degradability:		28d	1 - 2	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	

Calcium carbonate							
Toxicity/effect	Endpo int	Ti me	Val ue	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	>1 00	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	v/v saturated solution of test material
Toxicity to daphnia:	LC50	48h	>1	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	v/v saturated solution of test material
Toxicity to algae:	EC50	72h	>1 4	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
Toxicity to algae:	NOEC/ NOEL	72h	14	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
Persistence and degradability:							Not relevant for inorganic substances.
Bioaccumulative potential:							No
Mobility in soil:							n.a.
Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	>1 000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Toxicity to bacteria:	NOEC/ NOEL	3h	100 0	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other organisms:	NOEC/ NOEL	14d	100 0	mg/ kg dw	Eisenia foetida	OECD 207 (Earthworm, Acute Toxicity Tests)	
Other organisms:	NOEC/ NOEL	21d	100 0	mg/ kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Glycine max
Other organisms:	NOEC/ NOEL	21d	100 0	mg/ kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Avena sativa
Other organisms:	NOEC/ NOEL	21d	100 0	mg/ kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Lycopersicon esculentum
Other organisms:	NOEC/ NOEL	28d	100 0	mg/ kg dw		OECD 216 (Soil Microorganisms - Nitrogen Transformation Test)	
Water solubility:			0,0 166	g/l		OECD 105 (Water Solubility)	20°C

Methanol							
Toxicity/effect	Endpo int	Ti me	Val ue	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	154 00	mg/l	Lepomis macrochirus		
Toxicity to daphnia:	EC50	48h	>1 000 0	mg/l	Daphnia magna		
Toxicity to algae:	IC50	72h	800 0	mg/l			
Persistence and degradability:	BOD5/ COD		<5 0	%			
Bioaccumulative potential:	BCF		284 00		Chlorella vulgaris		
Other information:	BOD		>6 0	%			Readily biodegradable
Other information:	DOC		<7 0	%			

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC) 08 04 09 waste adhesives and sealants containing organic solvents or other dangerous substances  
 Recommendation:

Pay attention to local and national official regulations

E.g. suitable incineration plant.

E.g. dispose at suitable refuse site.

##### For contaminated packing material

Pay attention to local and national official regulations

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

15 01 10 packaging containing residues of or contaminated by dangerous substances

### SECTION 14: Transport information

#### General statements

UN number:

n.a.

#### Transport by road/by rail (ADR/RID)

UN proper shipping name:

n.a.

Transport hazard class(es):

n.a.

Packing group:

n.a.

Classification code:

n.a.

LQ (ADR 2013):

n.a.

LQ (ADR 2009):

n.a.

Environmental hazards:

Not applicable

Tunnel restriction code:

#### Transport by sea (IMDG-code)

UN proper shipping name:

n.a.

Transport hazard class(es):

n.a.

Packing group:

n.a.

Marine Pollutant:

n.a.

Environmental hazards:

Not applicable

#### Transport by air (IATA)

UN proper shipping name:

n.a.

Transport hazard class(es):

n.a.

Packing group:

n.a.

Environmental hazards:

Not applicable

#### Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Non-dangerous material according to Transport Regulations.

### SECTION 15: Regulatory information

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

For classification and labelling see Section 2.

Observe restrictions:

Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): 0 g/l

#### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

### SECTION 16: Other information

These details refer to the product as it is delivered.

Revised sections: 2, 3, 11, 12

#### Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Eye Irrit. 2, H319	Classification according to calculation procedure.
Aquatic Chronic 3, H412	Classification according to calculation procedure.

The following phrases represent the posted R phrases / H phrases, Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

10 Flammable.

20 Harmful by inhalation.

38 Irritating to skin.

41 Risk of serious damage to eyes.

22 Harmful if swallowed.

48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed.

52 Harmful to aquatic organisms.

53 May cause long-term adverse effects in the aquatic environment.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H315 Causes skin irritation.

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H318 Causes serious eye damage.

H332 Harmful if inhaled.

H372 Causes damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Eye Irrit. — Eye irritation

Aquatic Chronic — Hazardous to the aquatic environment - chronic

Flam. Liq. — Flammable liquid

Acute Tox. — Acute toxicity - inhalation

Skin Irrit. — Skin irritation

Eye Dam. — Serious eye damage

Acute Tox. — Acute toxicity - oral

STOT RE — Specific target organ toxicity - repeated exposure

**Any abbreviations and acronyms used in this document:**

AC Article Categories  
 acc., acc. to according, according to  
 ACGIH American Conference of Governmental Industrial Hygienists  
 ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 AOEL Acceptable Operator Exposure Level  
 AOX Adsorbable organic halogen compounds  
 approx. approximately  
 Art., Art. no. Article number  
 ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)  
 BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)  
 BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)  
 BCF Bioconcentration factor  
 BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)  
 BHT Butylhydroxytoluol (= 2,6-Di-*t*-butyl-4-methyl-phenol)  
 BMGV Biological monitoring guidance value (EH40, UK)  
 BOD Biochemical oxygen demand  
 BSEF Bromine Science and Environmental Forum  
 bw body weight  
 CAS Chemical Abstracts Service  
 CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids  
 CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques  
 CIPAC Collaborative International Pesticides Analytical Council  
 CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)  
 CMR carcinogenic, mutagenic, reproductive toxic  
 COD Chemical oxygen demand  
 CTFA Cosmetic, Toiletry, and Fragrance Association  
 DMEL Derived Minimum Effect Level  
 DNEL Derived No Effect Level  
 DOC Dissolved organic carbon  
 DT50 Dwell Time - 50% reduction of start concentration  
 DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)  
 dw dry weight  
 e.g. for example (abbreviation of Latin 'exempli gratia'), for instance  
 EC European Community  
 ECHA European Chemicals Agency  
 EEA European Economic Area  
 EEC European Economic Community  
 EINECS European Inventory of Existing Commercial Chemical Substances  
 ELINCS European List of Notified Chemical Substances  
 EN European Norms  
 EPA United States Environmental Protection Agency (United States of America)  
 ERC Environmental Release Categories  
 ES Exposure scenario  
 etc. et cetera  
 EU European Union  
 EWC European Waste Catalogue  
 Fax. Fax number  
 gen. general  
 GHS Globally Harmonized System of Classification and Labelling of Chemicals  
 GWP Global warming potential  
 HET-CAM Hen's Egg Test - Chorionallantoic Membrane  
 HGWP Halocarbon Global Warming Potential  
 IARC International Agency for Research on Cancer  
 IATA International Air Transport Association  
 IBC Intermediate Bulk Container  
 IBC (Code) International Bulk Chemical (Code)  
 IC Inhibitory concentration  
 IMDG-code International Maritime Code for Dangerous Goods  
 incl. including, inclusive  
 IUCLID International Uniform Chemical Information Database  
 LC lethal concentration  
 LC50 lethal concentration 50 percent kill  
 LCLo lowest published lethal concentration  
 LD Lethal Dose of a chemical  
 LD50 Lethal Dose, 50% kill  
 LDLo Lethal Dose Low  
 LOAEL Lowest Observed Adverse Effect Level  
 LOEC Lowest Observed Effect Concentration  
 LOEL Lowest Observed Effect Level  
 LQ Limited Quantities  
 MARPOL International Convention for the Prevention of Marine Pollution from Ships  
 n.a. not applicable  
 n.av. not available  
 n.c. not checked  
 n.d.a. no data available  
 NIOSH National Institute of Occupational Safety and Health (United States of America)  
 NOAEC No Observed Adverse Effective Concentration

NOAEL No Observed Adverse Effect Level  
 NOEC No Observed Effect Concentration  
 NOEL No Observed Effect Level  
 ODP Ozone Depletion Potential  
 OECD Organisation for Economic Co-operation and Development  
 org. organic  
 PAH polycyclic aromatic hydrocarbon  
 PBT persistent, bioaccumulative and toxic  
 PC Chemical product category  
 PE Polyethylene  
 PNEC Predicted No Effect Concentration  
 POCP Photochemical ozone creation potential  
 ppm parts per million  
 PROC Process category  
 PTFE Polytetrafluorethylene  
 REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)  
 REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.  
 RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)  
 SADT Self-Accelerating Decomposition Temperature  
 SAR Structure Activity Relationship  
 SU Sector of use  
 SVHC Substances of Very High Concern  
 Tel. Telephone  
 ThOD Theoretical oxygen demand  
 TOC Total organic carbon  
 TRGS Technische Regeln für Gefahrstoffe (= Technical Regulations for Hazardous Substances)  
 UN RTDG United Nations Recommendations on the Transport of Dangerous Goods  
 VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))  
 VOC Volatile organic compounds  
 vPvB very persistent and very bioaccumulative  
 WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).  
 WHO World Health Organization  
 wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

These statements were made by:

**Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90**

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