SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

SEAL AND BOND SIL 25

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

1.1. Product identifier

Product name : SEAL AND BOND SIL 25
Registration number REACH : Not applicable (mixture)
Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Sealing compound

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Novatio*
Industrielaan 5B
B-2250 Olen
☎ +32 14 25 76 40
🖷 +32 14 22 02 66
info@novatio.be
*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
🖷 +32 14 85 97 38
info@novatech.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :
+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

2.2. Label elements

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Supplemental information

EUH208	Contains: trimethoxyvinylsilane; 3-aminopropyltriethoxysilane. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

2.3. Other hazards

Caution! Substance is absorbed through the skin

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark	M-factors and ATE
3-aminopropyl(methyl)silsesquioxanes, ethoxy-terminated	128446-60-6	1%≤C<3%	Flam. Liq. 3; H226 Skin Irrit. 2; H315 Eye Irrit. 2; H319	(1)(10)	Constituent	
trimethoxyvinylsilane 01-2119513215-52	2768-02-7 220-449-8	0.1%≤C<1%	Flam. Liq. 3; H226 Skin Sens. 1B; H317 Acute Tox. 4; H332	(1)(6)(10)	Constituent	
3-aminopropyltriethoxysilane 01-2119480479-24	919-30-2 213-048-4	0.1%≤C<1%	Skin Sens. 1; H317 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318	(1)(6)(10)	Constituent	
dioctyltin oxide 01-2119971268-27	870-08-6 212-791-1	0.1% ≤C<0.3%	STOT SE 2; H371	(1)(2)(10)	Constituent	
ethanol 01-2119457610-43	64-17-5 200-578-6	C>1%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 Eye Irrit. 2; H319: C≥50%, (ECHA)	(1)(2)(6)(10)	Decomposition product	
methanol 01-2119433307-44	67-56-1 200-659-6	C>1%	Flam. Liq. 2; H225 Acute Tox. 3; H331 Acute Tox. 3; H311 Acute Tox. 3; H301 STOT SE 1; H370 STOT SE 1; H370: C≥10%, (CLP Annex VI (ATP 0)) STOT SE 2; H371: 3%≤C<10%, (CLP Annex VI (ATP 0))	(1)(2)(10)	Decomposition product	

(1) For H- and EUH-statements in full: see section 16
(2) Substance with a Community workplace exposure limit
(6) Enumerated in Annex VI of Regulation (EC) No. 1272/2008 but the classification has been adapted after evaluation of available test data
(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

SECTION 4: First aid measures

4.1. Description of first aid measures

General:
Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

After inhalation:
Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

After skin contact:
If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water. If irritation persists, consult a doctor/medical service.

After eye contact:
Rinse immediately with (lukewarm) water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

After ingestion:
Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

4.2.1 Acute symptoms

After inhalation:
EXPOSURE TO HIGH CONCENTRATIONS: Symptoms similar to those listed under ingestion.

After skin contact:
EXPOSURE TO HIGH CONCENTRATIONS: Symptoms similar to those listed under ingestion.

After eye contact:
No effects known.

After ingestion:
AFTER INGESTION OF HIGH QUANTITIES: Nausea. Vomiting. Headache. Dizziness. Visual disturbances. Blindness. Cramps/uncontrolled muscular contractions.

4.2.2 Delayed symptoms
No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting class B foam extinguisher, Quick-acting CO2 extinguisher.

Major fire: Class B foam (not alcohol-resistant).

5.1.2 Unsuitable extinguishing media:

Small fire: Water (quick-acting extinguisher, reel); risk of puddle expansion.

Major fire: Water; risk of puddle expansion.

5.2. Special hazards arising from the substance or mixture

Upon combustion: formation of CO, CO2 and small quantities of nitrous vapours. Hydrolyzes on exposure to water (moisture): release of highly flammable gases/vapours (ethanol). Hydrolyzes on exposure to water (moisture): release of toxic/combustible gases/vapours (methanol).

5.3. Advice for firefighters

5.3.1 Instructions:

No specific fire-fighting instructions required.

5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No naked flames. Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.

6.1.1 Protective equipment for non-emergency personnel

See section 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing

See section 8.2

6.2. Environmental precautions

Contain released product.

6.3. Methods and material for containment and cleaning up

Solid spill: cover with absorbent material. Solid spill: shovel. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

6.4. Reference to other sections

See section 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Keep away from naked flames/heat. Observe strict hygiene. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Meet the legal requirements. Store in a cool area. Store in a dry area. Keep container in a well-ventilated place.

7.2.2 Keep away from:

Heat sources, (strong) acids, (strong) bases, water/moisture.

7.2.3 Suitable packaging material:

No data available

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

EU

Methanol	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	200 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	260 mg/m³

Belgium

Alcool éthylique	Time-weighted average exposure limit 8 h	1000 ppm
	Time-weighted average exposure limit 8 h	1907 mg/m³
Alcool méthylique	Time-weighted average exposure limit 8 h	200 ppm
	Time-weighted average exposure limit 8 h	266 mg/m³
	Short time value	250 ppm
	Short time value	333 mg/m³
Etain (composés organiques de) (en Sn)	Time-weighted average exposure limit 8 h	0.1 mg/m³
	Short time value	0.2 mg/m³

The Netherlands

Ethanol	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	137 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	260 mg/m³
	Short time value (Public occupational exposure limit value)	1000 ppm
	Short time value (Public occupational exposure limit value)	1900 mg/m³
Methanol	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	100 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	133 mg/m³

France

Alcool éthylique	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1000 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1900 mg/m³
	Short time value (VL: Valeur non réglementaire indicative)	5000 ppm
	Short time value (VL: Valeur non réglementaire indicative)	9500 mg/m³
Etain (composés organiques d'), en Sn	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	0.1 mg/m³
	Short time value (VL: Valeur non réglementaire indicative)	0.2 mg/m³
Méthanol	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	200 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	260 mg/m³
	Short time value (VL: Valeur non réglementaire indicative)	1000 ppm
	Short time value (VL: Valeur non réglementaire indicative)	1300 mg/m³
	La VLCT n'est pas réglementaire et provient d'une circulaire du ministère chargé du travail.	

Germany

Ethanol	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm **(1)**
	Time-weighted average exposure limit 8 h (TRGS 900)	380 mg/m³ **(1)**
Methanol	Time-weighted average exposure limit 8 h (TRGS 900)	100 ppm **(2)**
	Time-weighted average exposure limit 8 h (TRGS 900)	130 mg/m³ **(2)**
Zinnverbindungen, organische - n-Octylzinnverbindungen: Di-n-octylzinnverbindungen	Time-weighted average exposure limit 8 h (TRGS 900)	0.002 ppm **(2)**
	Time-weighted average exposure limit 8 h (TRGS 900)	0.01 mg/m³ **(2)**
	Der Arbeitsplatzgrenzwert bezieht sich auf den Elementgehalt des entsprechenden Metalls.	
	Summe aus Dampf und Aerosolen.	

(1) UF: 4 (II)
(2) UF: 2 (II)

Austria

Ethanol	Tagesmittelwert (MAK)	1000 ppm
	Tagesmittelwert (MAK)	1900 mg/m³
	Kurzzeitwert 60(Mow) 3x (MAK)	2000 ppm
	Kurzzeitwert 60(Mow) 3x (MAK)	3800 mg/m³
Methanol	Tagesmittelwert (MAK)	200 ppm
	Tagesmittelwert (MAK)	260 mg/m³
	Kurzzeitwert 15(Miw) 4x (MAK)	800 ppm
	Kurzzeitwert 15(Miw) 4x (MAK)	1040 mg/m³
Zinnverbindungen, organische (außer Tri-n-butylzinnverbindungen)	Tagesmittelwert (MAK)	0.1 mg/m³ **(1)**
	Kurzzeitwert 15(Miw) 4x (MAK)	0.2 mg/m³ **(1)**

(1) Einatembare Fraktion; als Sn berechnet

UK

Ethanol	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1000 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1920 mg/m³
Methanol	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	200 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	266 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	250 ppm
	Short time value (Workplace exposure limit (EH40/2005))	333 mg/m³
Tin compounds, organic, except Cyhexatin (ISO), (as Sn)	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	0.1 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	0.2 mg/m³

Ireland

Ethanol	Short time value (Advisory occupational exposure limit values)	1000 ppm
Methanol	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	200 ppm
	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	260 mg/m³
Tin Organic compounds, as Sn	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	0.1 ppm

USA (TLV-ACGIH)

Ethanol	Short time value (TLV - Adopted Value)	1000 ppm
Methanol	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	200 ppm
	Short time value (TLV - Adopted Value)	250 ppm
Tin, organic compounds, as Sn	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	0.1 mg/m³
	Short time value (TLV - Adopted Value)	0.2 mg/m³

b) National biological limit values

If limit values are applicable and available these will be listed below.

Germany

Methanol (Methanol)	Urin: expositionsende, bzw. schichtende bei langzeitexposition: nach mehreren vorangegangenen schichten	15 mg/l	

USA (BEI-ACGIH)

Methanol (Methanol)	Urine: end of shift	15 mg/L	Background, Nonspecific

8.1.2 Sampling methods

Product name	Test	Number
Amines, Aliphatic	NIOSH	2010
Tin (Organic Cpds) (as Sn) (Organotin Compounds)	NIOSH	5504

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

DNEL/DMEL - Workers

trimethoxyvinylsilane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	27.6 mg/m³	
	Acute systemic effects inhalation	73.6 mg/m³	
	Long-term systemic effects dermal	0.91 mg/kg bw/day	

3-aminopropyltriethoxysilane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	14 mg/m³	
	Long-term systemic effects dermal	2 mg/kg bw/day	

DNEL/DMEL - General population

trimethoxyvinylsilane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	6.8 mg/m³	
	Acute systemic effects inhalation	54.4 mg/m³	
	Long-term systemic effects dermal	0.63 mg/kg bw/day	
	Long-term systemic effects oral	0.63 mg/kg bw/day	

3-aminopropyltriethoxysilane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	3.5 mg/m³	
	Long-term systemic effects dermal	1 mg/kg bw/day	
	Long-term systemic effects oral	1 mg/kg bw/day	

dioctyltin oxide

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects oral	2 µg/kg bw/day	

PNEC

3-aminopropyltriethoxysilane

Compartments	Value	Remark
STP	1.3 mg/l	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe strict hygiene. Do not eat, drink or smoke during work.

a) Respiratory protection:

Respiratory protection not required in normal conditions.

b) Hand protection:

Protective gloves against chemicals (EN 374).

Materials	Measured breakthrough time	Thickness	Protection index	Remark
butyl rubber	> 480 minutes	> 0.3 mm	Class 6	
nitrile rubber	> 10 minutes	> 0.4 mm	Class 1	

c) Eye protection:

Safety glasses (EN 166).

d) Skin protection:

Protective clothing (EN 14605 or EN 13034).

8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Paste
Colour	Colourless
Odour	Alcohol odour
Odour threshold	No data available in the literature
Melting point	No data available in the literature
Boiling point	No data available in the literature
Flammability	Not classified as flammable
Explosion limits	No data available in the literature
Flash point	65 °C
Auto-ignition temperature	> 400 °C ; DIN 51794
Decomposition temperature	No data available in the literature
pH	Not applicable (non-soluble in water)
Kinematic viscosity	No data available in the literature
Dynamic viscosity	> 1000000 mPa.s ; 20 °C
Solubility	Water ; insoluble
Log Kow	Not applicable (mixture)
Vapour pressure	No data available in the literature
Absolute density	1020 kg/m³ ; 23 °C ; ISO 1183-1

Relative density	1.02 ; 23 °C ; ISO 1183-1
Relative vapour density	No data available in the literature
Particle size	Not applicable

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Heating increases the fire hazard.

10.2. Chemical stability

No data available.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat.

10.5. Incompatible materials

(strong) acids, (strong) bases, water/moisture.

10.6. Hazardous decomposition products

Upon combustion: formation of CO, CO2 and small quantities of nitrous vapours. Hydrolyzes on exposure to water (moisture): release of highly flammable gases/vapours (ethanol). Hydrolyzes on exposure to water (moisture): release of toxic/combustible gases/vapours (methanol).

SECTION 11: Toxicological information

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

11.1.1 Test results

Acute toxicity

SEAL AND BOND SIL 25

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		> 2000 mg/kg bw		Rat	Similar product	
Dermal	LD50		> 2000 mg/kg bw		Rat	Similar product	

Judgement is based on the relevant ingredients

trimethoxyvinylsilane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	6899 mg/kg bw - 7012 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	3158 mg/kg bw - 3760 mg/kg bw	24 h	Rabbit (male / female)	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	16.8 mg/l	4 h	Rat (male / female)	Experimental value	

3-aminopropyltriethoxysilane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	EPA OTS 798.1175	2690 mg/kg bw		Rat (male)	Experimental value	
Oral	LD50	EPA OTS 798.1175	1490 mg/kg bw		Rat (female)	Experimental value	
Dermal	LD50	EPA OTS 798.1100	4076 mg/kg bw	24 h	Rabbit (male / female)	Experimental value	
Inhalation (vapours)	LC50	OECD 403	> 0.05 mg/l air	6 h	Rat (male)	Experimental value	
Inhalation (vapours)	LC50	OECD 403	> 0.15 mg/l air	6 h	Rat (female)	Experimental value	

dioctyltin oxide

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	> 6000 mg/kg		Rat (male / female)	Experimental value	
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat (male / female)	Experimental value	
Inhalation						Data waiving	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

SEAL AND BOND SIL 25

No (test)data on the mixture available

Judgement is based on the relevant ingredients

3-aminopropyl(methyl)silsesquioxanes, ethoxy-terminated

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating; category 2					Literature study	
Skin	Irritating; category 2					Literature study	

trimethoxyvinylsilane

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405	24 h	1; 24; 48; 72 hours	Rabbit	Experimental value	Single treatment with rinsing
Skin	Not irritating		24 h	24; 48; 72 hours	Rabbit	Experimental value	

3-aminopropyltriethoxysilane

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage	Equivalent to OECD 405		24; 48; 72 hours	Rabbit	Experimental value	Single treatment without rinsing
Skin	Corrosive	Equivalent to OECD 404	1 h	24; 48; 72 hours	Rabbit	Experimental value	

dioctyltin oxide

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		24; 48; 72 hours	Rabbit	Experimental value	Single treatment without rinsing
Not applicable (in vitro test)	Not irritating	OECD 439	15 minutes		Reconstructed human epidermis	Experimental value	

Conclusion

Not classified as irritating to the respiratory system

Not classified as irritating to the skin

Not classified as irritating to the eyes

Respiratory or skin sensitisation

SEAL AND BOND SIL 25

No (test)data on the mixture available

Judgement is based on the relevant ingredients

trimethoxyvinylsilane

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Sensitizing	OECD 406			Guinea pig (female)	Experimental value	

3-aminopropyltriethoxysilane

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Sensitizing	OECD 406			Guinea pig (male / female)	Experimental value	

dioctyltin oxide

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Dermal (on the ears)	Not sensitizing	OECD 429			Mouse (female)	Experimental value	

Conclusion

Not classified as sensitizing for inhalation

Not classified as sensitizing for skin

Specific target organ toxicity

SEAL AND BOND SIL 25

No (test)data on the mixture available

Judgement is based on the relevant ingredients

trimethoxyvinylsilane

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	OECD 422	62.5 mg/kg bw/day	No effect	6 weeks (daily)	Rat (male / female)	Experimental value	
Oral (stomach tube)	LOAEL	OECD 422	250 mg/kg bw/day	Bladder (histopathological changes)	6 weeks (daily)	Rat (male / female)	Experimental value	
Inhalation (vapours)	NOAEC	Subchronic toxicity test	0.605 mg/l	No effect	14 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	

3-aminopropyltriethoxysilane

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	OECD 408	200 mg/kg bw/day	No effect	91 day(s) - 92 day (s)	Rat (male / female)	Experimental value	
Oral (stomach tube)	LOAEL	OECD 408	600 mg/kg bw/day	Liver (enlargement /affection of the liver)	91 day(s) - 92 day (s)	Rat (male / female)	Experimental value	
Dermal	NOAEL	Subacute toxicity test	84 mg/kg bw/day	No effect	9 days (6h / day)	Rabbit (male / female)	Experimental value	
Inhalation (aerosol)	LOAEC	Equivalent to OECD 412	≥ 147 mg/l air	Larynx (laryngeal changes)	4 weeks (6h / day, 7 days / week)	Rat (male)	Experimental value	

dioctyltin oxide

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (diet)	NOAEL	OECD 422	0.3 mg/kg bw/day - 0.5 mg/kg bw/day	Thymus (no effect)	4 weeks (daily)	Rat (male / female)	Experimental value	
Oral (stomach tube)	Dose level		6.3 mg/kg bw/day	Thymus (atrophy)		Rat (male)	Experimental value	Single treatment
Dermal							Data waiving	
Inhalation							Data waiving	

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

SEAL AND BOND SIL 25

No (test)data on the mixture available

Judgement is based on the relevant ingredients

trimethoxyvinylsilane

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S. typhimurium and E. coli)	No effect	Experimental value	
Positive with metabolic activation, positive without metabolic activation	OECD 473	CHL/IU cells	Chromosome aberrations	Experimental value	

3-aminopropyltriethoxysilane

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)		Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 473	Chinese hamster lung fibroblasts (V79)		Experimental value	

dioctyltin oxide

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S. typhimurium and E. coli)	No effect	Experimental value	

Mutagenicity (in vivo)

SEAL AND BOND SIL 25

No (test)data on the mixture available

Judgement is based on the relevant ingredients

trimethoxyvinylsilane

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Inhalation (vapours))	OECD 489	2 dose(s)/24-hour interval	Rat (male)	No effect	Experimental value	

3-aminopropyltriethoxysilane

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Intraperitoneal)	Equivalent to OECD 474		Mouse (male / female)	No effect	Experimental value	Single intraperitoneal injection

dioctyltin oxide

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Oral (stomach tube))	OECD 474		Mouse (male)	Bone marrow (no effect)	Experimental value	Single treatment

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

SEAL AND BOND SIL 25

No (test)data on the mixture available

Judgement is based on the relevant ingredients

3-aminopropyltriethoxysilane

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Dermal	NOAEL	Carcinogenic toxicity study	209 mg/kg bw/day	Skin (no carcinogenic effect)	104 weeks (3 times / week)	Mouse (male / female)	Experimental value	

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

SEAL AND BOND SIL 25

No (test)data on the mixture available

Judgement is based on the relevant ingredients

trimethoxyvinylsilane

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Inhalation (vapours))	NOAEL	EPA OTS 798.4350	100 ppm	10 days (gestation, 6h / day)	Rat	No effect	Experimental value	
Maternal toxicity (Inhalation (vapours))	NOAEL	EPA OTS 798.4350	25 ppm	10 days (gestation, 6h / day)	Rat	No effect	Experimental value	
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 443	≥ 300 mg/kg bw/day		Rat (male / female)	No effect	Experimental value	

3-aminopropyltriethoxysilane

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	EPA OTS 798.4900	100 mg/kg bw/day	15 days (gestation, daily)	Rat	No effect	Experimental value	
Developmental toxicity (Oral (stomach tube))	LOAEL	EPA OTS 798.4900	600 mg/kg bw/day	15 days (gestation, daily)	Rat	Foetus (reduced skeletal ossification)	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL	EPA OTS 798.4900	100 mg/kg bw/day	15 days (gestation, daily)	Rat	No effect	Experimental value	
Maternal toxicity (Oral (stomach tube))	LOAEL	EPA OTS 798.4900	600 mg/kg bw/day	15 days (gestation, daily)	Rat	Maternal toxicity	Experimental value	
Effects on fertility (Oral (stomach tube))		OECD 443			Rat		Experimental study planned	

dioctyltin oxide

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (diet))	NOAEC		> 25 mg/kg food		Rat	No effect	Data waiving	Not relevant
Maternal toxicity (Oral (diet))	NOAEL	OECD 422	0.3 mg/kg bw/day - 0.5 mg/kg bw/day		Rat	Maternal toxicity	Experimental value	
Effects on fertility (Oral (diet))	Dose level	OECD 443	200 mg/kg bw/day		Rat (male / female)	Adverse effects on fertility	Experimental value	

Conclusion

Not classified for reprotoxic or developmental toxicity

Aspiration hazard

SEAL AND BOND SIL 25

Judgement is based on the relevant ingredients

Not classified for aspiration toxicity

Toxicity other effects

SEAL AND BOND SIL 25

No (test)data on the mixture available

dioctyltin oxide

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral	LOAEL		100 mg/kg bw/day	(weakening of the immune system)		Rat (male)	Experimental value	Single treatment

Chronic effects from short and long-term exposure

SEAL AND BOND SIL 25

Skin rash/inflammation.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

SEAL AND BOND SIL 25

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		> 100 mg/l	96 h	Pisces			Expert judgement
Acute toxicity crustacea	EC50		> 100 mg/l	48 h	Daphnia magna			Expert judgement
Toxicity algae and other aquatic plants	ErC50		> 100 mg/l	72 h	Pseudokirchneriella subcapitata	Static system		Literature study; Nominal concentration
	NOEC		> 1 mg/l	24 h	Navicula pelliculosa			Calculated value; Similar product
Long-term toxicity fish	NOEC		> 1 mg/l		Oncorhynchus mykiss			Calculated value; Similar product
Long-term toxicity aquatic crustacea	NOEC		> 1 mg/l		Daphnia magna			Calculated value; Similar product

Judgement of the mixture is based on the relevant ingredients

trimethoxyvinylsilane

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		191 mg/l	96 h	Oncorhynchus mykiss		Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EC50	EU Method C.2	169 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	ErC50		> 89 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
	NOEC		> 89 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
Long-term toxicity aquatic crustacea	NOEC	OECD 211	28 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; GLP
Toxicity aquatic micro-organisms	EC50	OECD 209	> 100 mg/l	3 h	Activated sludge	Static system	Fresh water	Experimental value; Nominal concentration

3-aminopropyltriethoxysilane

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	> 934 mg/l	96 h	Brachydanio rerio	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EC50	OECD 202	331 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	ErC50	EU Method C.3	> 1000 mg/l	72 h	Scenedesmus subspicatus	Static system	Fresh water	Experimental value; GLP

dioctyltin oxide

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	> 0.09 mg/l	96 h	Danio rerio	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EC50	OECD 202	> 0.21 mg/l	48 h	Daphnia magna	Semi-static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	OECD 201	> 0.002 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value
	NOEC	OECD 201	> 0.001 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value
Toxicity aquatic micro-organisms	NOEC	OECD 209	1000 mg/l	3 h	Activated sludge	Static system	Fresh water	Experimental value; Nominal concentration

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

trimethoxyvinylsilane

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	51 %; GLP	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	4.5 h	1.5E6 /cm³	Calculated value

Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
OECD 111	< 2.4 h; pH = 7	Primary degradation	Weight of evidence

3-aminopropyltriethoxysilane

Biodegradation water

Method	Value	Duration	Value determination
OECD 306	75 %; Oxygen consumption	28 day(s)	Experimental value

Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
Equivalent to OECD 111	0.15 h - 8.5 h	Primary degradation	Experimental value

dioctyltin oxide

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	1.9 %	28 day(s)	Experimental value

Conclusion

Water

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

SEAL AND BOND SIL 25

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

3-aminopropyl(methyl)silsesquioxanes, ethoxy-terminated

Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

trimethoxyvinylsilane

Log Kow

Method	Remark	Value	Temperature	Value determination
KOWWIN		1.1	20 °C	QSAR

3-aminopropyltriethoxysilane

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	OECD 305	3.4; Fresh weight	8 week(s)	Cyprinus carpio	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
		-4 - 0.7	20 °C	QSAR

dioctyltin oxide

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		0.5 l/kg		Pisces	Calculated value

Log Kow

Method	Remark	Value	Temperature	Value determination
KOWWIN		9.3		Estimated value

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

trimethoxyvinylsilane

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	2.8	Calculated value

3-aminopropyltriethoxysilane

(log) Koc

Parameter	Method	Value	Value determination
log Koc		-0.6	Literature study

dioctyltin oxide

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	5.2 - 8.0	QSAR

Conclusion

Contains component(s) with potential for mobility in the soil

Contains component(s) that adsorb(s) into the soil

12.5. Results of PBT and vPvB assessment

Due to insufficient data no statement can be made whether the component(s) fulfil(s) the criteria of PBT and vPvB according to Annex XIII of Regulation (EC) No 1907/2006.

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

SEAL AND BOND SIL 25

Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

3-aminopropyl(methyl)silsesquioxanes, ethoxy-terminated

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

3-aminopropyltriethoxysilane

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Groundwater

Groundwater pollutant

Water ecotoxicity pH

pH shift

dioctyltin oxide

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 04 10 (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants other than those mentioned in 08 04 09). The waste code must be assigned by the user, preferably in consultation with the (environmental) authorities concerned.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

No data available

SECTION 14: Transport information

Road (ADR), Rail (RID), Inland waterways (ADN), Sea (IMDG/IMSBC), Air (ICAO-TI/IATA-DGR)

14.1. UN number or ID number

Transport	Not subject

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Hazard identification number	
Class	
Classification code	

14.4. Packing group

Packing group	
Labels	

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	

14.7. Maritime transport in bulk according to IMO instruments

Annex II of MARPOL 73/78	Not applicable, based on available data

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
> 2 %	
> 20 g/l	

Directive 2012/18/EU (Seveso III)

Not subject to registration according to Directive 2012/18/EU (Seveso III)

REACH Candidate list

Does not contain component(s) included in candidate list of substances of very high concern (SVHC) for authorisation (Article 59 of Regulation (EC) No 1907/2006)

REACH Annex XIV - Authorisation

Does not contain component(s) included in Annex XIV of Regulation (EC) No 1907/2006: list of substances subject to authorisation

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
· 3-aminopropyl(methyl)silsesquioxanes, ethoxy-terminated · trimethoxyvinylsilane · 3-aminopropyltriethoxysilane	Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with H304, 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN). 5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: “Keep lamps filled with this liquid out of the reach of children”; and, by 1 December 2010, “Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life- threatening lung damage”; b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: “Just a sip of grill lighter may lead to life threatening lung damage”; c) lamp oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
· dioctyltin oxide	Organostannic compounds	1. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is acting as biocide in free association paint. 2. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture acts as biocide to prevent the fouling by micro-organisms, plants or animals of: (a) all craft irrespective of their length intended for use in marine, coastal, estuarine and inland waterways and lakes; (b) cages, floats, nets and any other appliances or equipment used for fish or shellfish farming; (c) any totally or partly submerged appliance or equipment. 3. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use in the treatment of industrial waters. 4. Tri-substituted organostannic compounds: a) Tri-substituted organostannic compounds such as tributyltin (TBT) compounds and triphenyltin (TPT) compounds shall not be used after 1 July 2010 in articles where the concentration in the article, or part thereof, is greater than the equivalent of 0,1 % by weight of tin. b) Articles not complying with point (a) shall not be placed on the market after 1 July 2010, except for articles that were already in use in the Community before that date. 5. Dibutyltin (DBT) compounds: a) Dibutyltin (DBT) compounds shall not be used after 1 January 2012 in mixtures and articles for supply to the general public where the concentration in the mixture or the article, or part thereof, is greater than the equivalent of 0,1 % by weight of tin. b) Articles and mixtures not complying with point (a) shall not be placed on the market after 1 January 2012, except for articles that were already in use in the Community before that date. c) By way of derogation, points (a) and (b) shall not apply until 1 January 2015 to the following articles and mixtures for supply to the general public: — one-component and two-component room temperature vulcanisation sealants (RTV-1 and RTV-2 sealants) and adhesives, — paints and coatings containing DBT compounds as catalysts when applied on articles, — soft polyvinyl chloride (PVC) profiles whether by themselves or coextruded with hard PVC, — fabrics coated with PVC containing DBT compounds as stabilisers when intended for outdoor applications, — outdoor rainwater pipes, gutters and fittings, as well as covering material for roofing and façades, d) By way of derogation, points (a) and (b) shall not apply to materials and articles regulated under Regulation (EC) No 1935/2004. 6. Dioctyltin (DOT) compound: (a) Dioctyltin (DOT) compounds shall not be used after 1 January 2012 in the following articles for supply to, or use by, the general public, where the concentration in the article, or part thereof, is greater than the equivalent of 0,1 % by weight of tin: — textile articles intended to come into contact with the skin, — gloves, — footwear or part of footwear intended to come into contact with the skin, — wall and floor coverings, — childcare articles, — female hygiene products, — nappies, — two-component room temperature vulcanisation moulding kits (RTV-2 moulding kits).

		(b) Articles not complying with point (a) shall not be placed on the market after 1 January 2012, except for articles that were already in use in the Community before that date.
· 3-aminopropyl(methyl)silsesquioxanes, ethoxy-terminated · trimethoxyvinylsilane	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.	1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following: — metallic glitter intended mainly for decoration, — artificial snow and frost, — “whoopee” cushions, — silly string aerosols, — imitation excrement, — horns for parties, — decorative flakes and foams, — artificial cobwebs, — stink bombs. 2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: “For professional users only”. 3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC. 4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.
· 3-aminopropyltriethoxysilane	Substances falling within one or more of the following points: (a) substances classified as any of the following in Part 3 of Annex VI to Regulation (EC) No 1272/2008: — carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, but excluding any such substances classified due to effects only following exposure by inhalation — reproductive toxicant category 1A, 1B or 2 but excluding any such substances classified due to effects only following exposure by inhalation — skin sensitiser category 1, 1A or 1B — skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2 — serious eye damage category 1 or eye irritant category 2 (b) substances listed in Annex II to Regulation (EC) No 1223/2009 of the European Parliament and of the Council (c) substances listed in Annex IV to Regulation (EC) No 1223/2009 for which a condition is specified in at least one of the columns g, h and i of the table in that Annex (d) substances listed in Appendix 13 to this Annex. The ancillary requirements in paragraphs 7 and 8 of column 2 of this entry apply to all mixtures for use for tattooing purposes, whether or not they contain a substance falling within points (a) to (d) of this column of this entry.	Mixtures for tattooing purposes are subject to the restrictions of Regulation (EU) 2020/2081

National legislation Belgium

SEAL AND BOND SIL 25

No data available

dioctyltin oxide

Résorption peau	Etain (composés organiques de) (en Sn); D; La mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air.

methanol

Résorption peau	Alcool méthylique; D; La mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air.

National legislation The Netherlands

SEAL AND BOND SIL 25

Waterbezwaarlijkheid	Z (1); Algemene Beoordelingsmethodiek (ABM)

National legislation France

SEAL AND BOND SIL 25

No data available

National legislation Germany

SEAL AND BOND SIL 25

WGK	1; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017

trimethoxyvinylsilane

TA-Luft	5.2.5

3-aminopropyltriethoxysilane

TA-Luft	5.2.5

dioctyltin oxide

TA-Luft	5.2.5/I
TRGS900 - Risiko der Fruchtschädigung	Zinnverbindungen, organische - n-Octylzinnverbindungen: Di-n-octylzinnverbindungen; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
Hautresorptive Stoffe	Zinnverbindungen, organische - n-Octylzinnverbindungen: Di-n-octylzinnverbindungen; H; Hautresorptiv

National legislation Austria

SEAL AND BOND SIL 25

No data available

dioctyltin oxide

Fortpflanzungsgefährdend [fruchtschädigend (entwicklungsschädigend)]	Zinnverbindungen, organische (außer Tri-n- butylzinnverbindungen); D
besondere Gefahr der Hautresorption	Zinnverbindungen, organische (außer Tri-n- butylzinnverbindungen); H

National legislation United Kingdom

SEAL AND BOND SIL 25

No data available

dioctyltin oxide

Skin absorption	Tin compounds, organic, except Cyhexatin (ISO), (as Sn); Sk

National legislation Ireland

SEAL AND BOND SIL 25

No data available

Other relevant data

SEAL AND BOND SIL 25

No data available

dioctyltin oxide

TLV - Carcinogen	Tin, organic compounds, as Sn; A4
TLV - Skin absorption	Tin, organic compounds, as Sn; Skin; Danger of cutaneous absorption

15.2. Chemical safety assessment

No chemical safety assessment is required for a mixture.

SECTION 16: Other information

Full text of any H- and EUH-statements referred to under section 3:

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic 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.
H370 Causes damage to organs (central nervous system, eyes (blindness)).
H371 May cause damage to organs (immune system) if swallowed.
EUH208 Contains a sensitising substance. May produce an allergic reaction.
EUH210 Safety data sheet available on request.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BEI	Biological Exposure Indices
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC10	Effect Concentration 10 %
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
GLP	Good Laboratory Practice
LC0	Lethal Concentration 0 %
LC50	Lethal Concentration 50 %

LD50	Lethal Dose 50 %
LOAEC/LOAEL	Lowest Observed Adverse Effect Concentration/Lowest Observed Adverse Effect Level
NOAEC/NOAEL	No Observed Adverse Effect Concentration/No Observed Adverse Effect Level
NOEC/NOEL	No Observed Effect Concentration/No Observed Effect Level
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.