

# SAFETY DATA SHEET

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



## SEAL & BOND FLEX-SIL

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

#### 1.1. Product identifier

Product name : SEAL & BOND FLEX-SIL  
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  
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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: 3-aminopropyltriethoxysilane. May produce an allergic reaction.  
EUH210 Safety data sheet available on request.

#### 2.3. Other hazards

No other hazards known

### 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
5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diaza-5-silanon-2,7-diene 01-2119982962-22	58190-57-1	1%<C<3%	STOT RE 2; H373	(1)(10)	Constituent	

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)  
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Publication date: 2021-02-03

Revision number: 0000

Product number: 66834

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878-16239-012-en

# SEAL & BOND FLEX-SIL

3-aminopropyltriethoxysilane 01-2119480479-24	919-30-2 213-048-4	C<1%	Skin Sens. 1; H317 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318	(1)(6)(10)	Constituent	
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(1) For H- and EUH-statements in full: see heading 16

(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:

No effects known.

##### After skin contact:

No effects known.

##### After eye contact:

No effects known.

##### After ingestion:

No effects known.

#### 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.

### 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.

#### 6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

#### 6.1.2 Protective equipment for emergency responders

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

Suitable protective clothing

See heading 8.2

### 6.2. Environmental precautions

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Contain released product. Plug the leak, cut off the supply.

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

Solid spill: cover with absorbent material. Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

## 6.4. Reference to other sections

See heading 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. Keep out of direct sunlight. Keep only in the original container.

#### 7.2.2 Keep away from:

Heat sources, (strong) acids, oxidizing agents.

#### 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.

##### b) National biological limit values

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

#### 8.1.2 Sampling methods

Product name	Test	Number
Amines, Aliphatic	NIOSH	2010

#### 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

5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diazona-2,7-diene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.419 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	0.059 mg/kg bw/day	

3-aminopropyltriethoxysilane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	14 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	2 mg/kg bw/day	

##### DNEL/DMEL - General population

5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diazona-2,7-diene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.103 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	0.03 mg/kg bw/day	
	Long-term systemic effects oral	0.03 mg/kg bw/day	

3-aminopropyltriethoxysilane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	3.5 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	1 mg/kg bw/day	
	Long-term systemic effects oral	1 mg/kg bw/day	

PNEC

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5-ethyl-2,8-dimethyl-5-[[propaan-2-ylideneamino]oxy]-4,6-dioxa-3,7-diaza-5-silanona-2,7-diene

Compartments	Value	Remark
Fresh water	0.24 mg/l	
Marine water	0.024 mg/l	
STP	2.398 mg/l	
Fresh water sediment	2047.053 mg/kg sediment dw	
Marine water sediment	204.705 mg/kg sediment dw	
Soil	240.95 mg/kg soil dw	
Oral	2.638 mg/kg food	

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).

#### c) Eye protection:

Safety glasses (EN 166).

#### d) Skin protection:

Protective clothing (EN 14605 or EN 13034). In case of dust production: head/neck protection. In case of dust production: dustproof clothing (EN 13982).

### 8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

## SECTION 9: Physical and chemical properties

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

Physical form	Paste
Odour	Characteristic odour
Odour threshold	No data available in the literature
Colour	Red-black
Particle size	Not applicable
Explosion limits	No data available in the literature
Flammability	Not classified as flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available in the literature
Kinematic viscosity	No data available in the literature
Melting point	No data available in the literature
Boiling point	No data available in the literature
Relative vapour density	Not applicable
Vapour pressure	No data available in the literature
Solubility	Water ; insoluble
Relative density	1.2
Absolute density	1200 kg/m <sup>3</sup>
Decomposition temperature	No data available in the literature
Auto-ignition temperature	435 °C
Flash point	> 93 °C
pH	No data available in the literature

### 9.2. Other information

Explosive properties	Not classified
Oxidising properties	Not classified

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Heating increases the fire hazard.

### 10.2. Chemical stability

Stable under normal conditions.

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## 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, oxidizing agents.

## 10.6. Hazardous decomposition products

Upon combustion: formation of CO, CO<sub>2</sub> and small quantities of nitrous vapours.

## 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 & BOND FLEX-SIL

No (test) data on the mixture available

Judgement is based on the relevant ingredients

5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diaza-5-silanon-2,7-diene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 423	> 2500 mg/kg bw		Rat (female)	Experimental value	
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat (male / female)	Experimental value	
Inhalation						Data waiving	

##### 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	> 0.145 mg/l air	6 h	Rat (female)	Experimental value	

#### Conclusion

Not classified for acute toxicity

#### Corrosion/irritation

##### SEAL & BOND FLEX-SIL

No (test) data on the mixture available

Judgement is based on the relevant ingredients

5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diaza-5-silanon-2,7-diene

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		24; 72 hours	Rabbit	Experimental value	Single treatment
Not applicable (in vitro test)	Not irritating	OECD 439	15 minutes	42 hours	Reconstructed human epidermis	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	
Skin	Corrosive	Equivalent to OECD 404	1 h	24; 48; 72 hours	Rabbit	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 & BOND FLEX-SIL

No (test) data on the mixture available

Judgement is based on the relevant ingredients

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# SEAL & BOND FLEX-SIL

5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diaza-5-silanona-2,7-diene

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 429			Mouse (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	

## Conclusion

Not classified as sensitizing for inhalation

Not classified as sensitizing for skin

## Specific target organ toxicity

### SEAL & BOND FLEX-SIL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diaza-5-silanona-2,7-diene

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	OECD 408	15 mg/kg bw/day	Blood	No effect	90 days (1x / day)	Rat (male / female)	Experimental value

3-aminopropyltriethoxysilane

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
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/m <sup>3</sup> air	Larynx	Laryngeal changes	4 weeks (6h / day, 7 days / week)	Rat (male)	Experimental value

## Conclusion

Not classified for subchronic toxicity

## Mutagenicity (in vitro)

### SEAL & BOND FLEX-SIL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diaza-5-silanona-2,7-diene

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 476	Mouse (lymphoma L5178Y cells)		Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)		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	

## Mutagenicity (in vivo)

### SEAL & BOND FLEX-SIL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diaza-5-silanona-2,7-diene

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative (Oral (stomach tube))	OECD 474		Mouse (male / female)	Bone marrow	Experimental value

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# SEAL & BOND FLEX-SIL

## 3-aminopropyltriethoxysilane

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative (Intraperitoneal)	Equivalent to OECD 474		Mouse (male / female)		Experimental value

### Conclusion

Not classified for mutagenic or genotoxic toxicity

## Carcinogenicity

### SEAL & BOND FLEX-SIL

No (test) data on the mixture available

Judgement is based on the relevant ingredients

## 3-aminopropyltriethoxysilane

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

### Conclusion

Not classified for carcinogenicity

## Reproductive toxicity

### SEAL & BOND FLEX-SIL

No (test) data on the mixture available

Judgement is based on the relevant ingredients

## 5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diaza-5-silanonona-2,7-diene

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Effects on fertility (Oral (stomach tube))	NOAEL (P/F1)	OECD 415	> 100 mg/kg bw/day	≥ 7 week(s)	Rat (male / female)	No effect		Experimental value

## 3-aminopropyltriethoxysilane

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

### Conclusion

Not classified for reprotoxic or developmental toxicity

## Toxicity other effects

### SEAL & BOND FLEX-SIL

No (test) data on the mixture available

## Chronic effects from short and long-term exposure

### SEAL & BOND FLEX-SIL

Skin rash/inflammation.

## 11.2. Information on other hazards

No evidence of endocrine disrupting properties

## SECTION 12: Ecological information

### 12.1. Toxicity

#### SEAL & BOND FLEX-SIL

No (test) data on the mixture available

Judgement of the mixture is based on the relevant ingredients

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# SEAL & BOND FLEX-SIL

5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diaza-5-silanona-2,7-diene

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	558 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value
Acute toxicity crustacea	EC50	OECD 202	544.34 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	ErC50	OECD 201	252.92 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
	NOEC	OECD 201	50 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea								Data waiving
Toxicity aquatic micro-organisms	EC50	OECD 209	> 300 mg/l	3 h	Activated sludge	Static system	Fresh water	Experimental value; GLP

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

## Conclusion

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

## 12.2. Persistence and degradability

5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diaza-5-silanona-2,7-diene

### Biodegradation water

Method	Value	Duration	Value determination
OECD 301D	9.1 %; GLP	28 day(s)	Weight of evidence

### Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
EU Method C.7	< 1 h; GLP	Primary degradation	Experimental value

3-aminopropyltriethoxysilane

### Biodegradation water

Method	Value	Duration	Value determination
EU Method C.4	67 %; GLP	28 day(s)	Experimental value

### Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	2.427 h	1.5E6 /cm <sup>3</sup>	Calculated 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

## Conclusion

### Water

Contains non readily biodegradable component(s)

## 12.3. Bioaccumulative potential

SEAL & BOND FLEX-SIL

### Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diaza-5-silanona-2,7-diene

### BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFWIN	3.162 l/kg			Read-across

### Log Kow

Method	Remark	Value	Temperature	Value determination
		0.2		Experimental value

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# SEAL & BOND FLEX-SIL

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

## Conclusion

Does not contain bioaccumulative component(s)

## 12.4. Mobility in soil

3-aminopropyltriethoxysilane

### (log) Koc

Parameter	Method	Value	Value determination
log Koc		-0.6	QSAR

## Conclusion

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

## 12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in 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 & BOND FLEX-SIL

#### Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

#### Ozone-depleting potential (ODP)

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

#### Groundwater

Groundwater pollutant

3-aminopropyltriethoxysilane

#### Groundwater

Groundwater pollutant

## 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). Depending on branch of industry and production process, also other waste codes may be applicable.

#### 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

Transport	Not subject
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#### 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
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#### 14.6. Special precautions for user

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# SEAL & BOND FLEX-SIL

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
< 2.5 %	Calculated
< 30 g/l	

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
· 5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diaza-5-silanona-2,7-diene · 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.

#### National legislation Belgium

SEAL & BOND FLEX-SIL

No data available

#### National legislation The Netherlands

SEAL & BOND FLEX-SIL

Waterbezwaarlijkheid

B (4); Algemene Beoordelingsmethodiek (ABM)

#### National legislation France

SEAL & BOND FLEX-SIL

No data available

#### National legislation Germany

SEAL & BOND FLEX-SIL

WGK

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

5-ethyl-2,8-dimethyl-5-[(propan-2-ylideneamino)oxy]-4,6-dioxo-3,7-diaza-5-silanona-2,7-diene

TA-Luft

5.2.5/l

3-aminopropyltriethoxysilane

TA-Luft

5.2.5/l

#### National legislation United Kingdom

SEAL & BOND FLEX-SIL

No data available

#### Other relevant data

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No data available

### 15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

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## SECTION 16: Other information

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

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H373 May cause damage to organs (red blood cells) through prolonged or repeated exposure if swallowed.
- EUH210 Safety data sheet available on request.
- EUH208 Contains a sensitising substance. May produce an allergic reaction.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
ATE	Acute Toxicity Estimate
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC50	Effect Concentration 50 %
ERC50	EC50 in terms of reduction of growth rate
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
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.

Publication date: 2021-02-03