

SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830

Fix All Crystal

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

1.1. Product identifier

Product name : Fix All Crystal

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

Adhesive

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

SOUDAL N.V. Everdongenlaan 18-20 B-2300 Turnhout **3** +32 14 42 42 31 +32 14 42 65 14 msds@soudal.com

Manufacturer of the product

SOUDAL N.V. Everdongenlaan 18-20 B-2300 Turnhout **3** +32 14 42 42 31 +32 14 42 65 14 msds@soudal.com

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

2.3. Other hazards

No other hazards known

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

		EC No		Conc. (C)	Classification according to CLP	Note	Remark
trimethoxyvinylsilane 01-2119513215-52				- 1	Flam. Liq. 3; H226 Acute Tox. 4; H332 STOT RE 2; H373	(1)(10)	Constituent
3-(trimethoxysilyl)propylamine 01-2119510159-45		13822-56-5 237-511-5			Eye Dam. 1; H318 Skin Irrit. 2; H315	(1)(10)	Constituent

⁽¹⁾ For H-statements in full: see heading 16

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

Technische Schoolstraat 43 A, B-2440 Geel

http://www.big.be © BIG vzw

Reason for revision: 2;3 Revision number: 0600 Publication date: 2011-07-19

Date of revision: 2017-09-26

1/12 Product number: 51334

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

If you feel unwell, seek medical advice.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Rinse with water. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Consult a doctor/medical service if you feel unwell.

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:

Adapt extinguishing media to the environment for surrounding fires.

5.1.2 Unsuitable extinguishing media:

Not applicable.

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. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Contain released product. Use appropriate containment to avoid environmental contamination.

6.3. Methods and material for containment and cleaning up

Cover spill with inert material, e.g.: sand, earth, vermiculite. 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.

Reason for revision: 2;3 Publication date: 2011-07-19
Date of revision: 2017-09-26

Revision number: 0600 Product number: 51334 2 / 12

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

Observe normal hygiene standards. Keep container tightly closed. Remove contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Meet the legal requirements. Store at room temperature. Max. storage time: 1 year(s).

7.2.2 Keep away from:

No data available.

7.2.3 Suitable packaging material:

Synthetic material.

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

If applicable and available it will be listed below.

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 DNEL/PNEC values

DNEL/DMEL - Workers

trimethoxyvinylsilane

Effect level (DNEL/DM	EL)	Туре	Value	Remark
DNEL		Long-term systemic effects inhalation	2.6 mg/m ³	
		Acute systemic effects inhalation	2.6 mg/m³	
		Long-term systemic effects dermal	0.2 mg/kg bw/day	
		Acute systemic effects dermal	0.2 mg/kg bw/day	

3-(trimethoxysilyl)propylamine

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	58 mg/m³	
	Long-term systemic effects dermal	8.3 mg/kg hw/day	

DNEL/DMEL - General population

trimethoxyvinylsilane

Effect level (DNEL/DM	EL)	Туре	Value	Remark
DNEL		Long-term systemic effects inhalation	0.7 mg/m ³	
		Acute systemic effects inhalation	0.7 mg/m ³	
		Long-term systemic effects dermal	0.1 mg/kg bw/day	
		Acute systemic effects dermal	0.1 mg/kg bw/day	
		Long-term systemic effects oral	0.1 mg/kg bw/day	

3-(trimethoxysilyl)propylamine

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	17 mg/m³	
	Long-term systemic effects dermal	5 mg/kg bw/day	
	Long-term systemic effects oral	5 mg/kg bw/day	

<u>PNEC</u>

trimethoxyvinylsilane

Compartments	Value	Remark
Fresh water	0.36 mg/l	
Marine water	<mark>0.036 m</mark> g/l	
STP	6.6 mg/l	
Fresh water sediment	1.3 mg/kg sediment dw	
Marine water sediment	<mark>0.13 mg/</mark> kg sediment dw	
Soil	<mark>0.055 m</mark> g/kg soil dw	

Reason for revision: 2;3 Publication date: 2011-07-19
Date of revision: 2017-09-26

Revision number: 51334 3 / 12

3-(trimethoxysilyl)propylamine

Compartments	Value	Remark
Fresh water	<mark>0.33 mg</mark> /l	
Marine water	<mark>0.033 m</mark> g/l	
Aqua (intermittent releases)	3.3 mg/l	
STP	13 mg/l	
Fresh water sediment	1.2 mg/kg sediment dw	
Marine water sediment	0.12 mg/kg sediment dw	
Soil	0.045 mg/kg soil dw	
Oral	44.4 mg/kg food	

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

8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Keep container tightly closed. Do not eat, drink or smoke during work.

a) Respiratory protection:

Respiratory protection not required in normal conditions.

b) Hand protection:

Gloves.

c) Eye protection:

Eye protection not required in normal conditions.

d) Skin protection:

Protective clothing.

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		Mild odour							
		Characteristic of	odour						
Odour threshold		No data availal	ole						
Colour		Variable in colo	our, depend	ding on th	ne compositio	n			
Particle size		No data availal	ole						
Explosion limits		No data availal	ole						
Flammability		Non combustik	ole						
Log Kow		Not applicable	(mixture)						
Dynamic viscosity		No data availal	ole						
Kinematic viscosity		No data availal	ole						
Melting point		No data availal	ole			_4			
Boiling point		No data availal	ole						
Flash point		No data availal	ole						
Evaporation rate		No data availal	ole						
Relative vapour density		No data availal	ole						
Vapour pressure		No data availal	ole						
Solubility		Water ; insoluk	ole				h		
		Organic solven	ts ; soluble	2 /					
Relative density		1.08 ; 20 °C	-			7			
Decomposition temperat	ure	No data availal	ole						
Auto-ignition temperatur	re ·	No data availal	ole						
Explosive properties		No chemical gr	oup associ	iated with	explosive pr	operties			
Oxidising properties		No chemical gr	oup associ	iated with	oxidising pro	perties			
рН		No data availal	ole						

9.2. Other information

_				f
	Absolute density	1080 kg/m ³ :	20 °C	

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Reason for revision: 2;3 Publication date: 2011-07-19
Date of revision: 2017-09-26

Revision number: 0600 Product number: 51334 4/12

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Upon combustion: formation of CO, CO2 and small quantities of nitrous vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

Fix All Crystal

No (test)data on the mixture available

Judgement is based on the relevant ingredients

trimethoxyvinylsilane

Route of exposure	Paramete	er Method	Value	Exposure time			Remark
						determination	
Oral	LD50	Equivalent to OECD	7120 mg/kg bw -		Rat (male/female)	Experimental value	
		401	7236 mg/kg bw				
Dermal	LD50	Equivalent to OECD	3259 mg/kg bw	24 h	Rabbit (female)	Converted value	
		402					
Inhalation (vapours)	LC50	Equivalent to OECD	16.81 mg/l	4 h	Rat (male/female)	Experimental value	
, , ,		403				l .	

3-(trimethoxysilyl)propylamine

Route of exposure	oute of exposure Parameter		ter Method Value		Exposure time	Species	Value determination	Remark
Oral	LD50		Equivalent to OECD 401	2.970 ml/kg bw		Rat (male)	Experimental value	
Dermal	LD50		Equivalent to OECD 402	11.3 ml/kg bw	24 h	Rabbit (male)	Experimental value	
Inhalation (vapours)	LC50		OECD 403	> 5 ppm	6 h	Rat (male)	Read-across	
Inhalation (vapours)	LC50		OECD 403	> 16 ppm	6 h	Rat (female)	Read-across	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

Fix All Crystal

Route of exposure	Result		Method	Exposu	re time	Time p	ooint	 Value determination	Remark
	Not irrit	ating	OECD 437					Experimental value	

In the light of practical experience, the classification for this mixture is less stringent than the one based on the calculation set out

trimethoxyvinylsilane

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

3-(trimethoxysilyl)propylamine

Route of exposure	Result		Method	Exposure time		Time point	-	Value determination	Remark
Eye	Serious	,	Equivalent to			24; 48; 72 hours	Rabbit	Read-across	
	damage	!	OECD 405						
Skin	Irritatin	g	OECD 404	<mark>3 min</mark> utes - 24	0	1; 24; 48; 72; 168	Rat	Calculated value	
				minutes		hours			

Conclusion

Not classified as irritating to the skin Not classified as irritating to the eyes

Reason for revision: 2;3 Publication date: 2011-07-19
Date of revision: 2017-09-26

Revision number: 0600 Product number: 51334 5 / 12

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

Fix All Crystal

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	Not sensitizing	OECD 406		24; 48 hours	Guinea pig	Experimental value	
					(male/female)		

3-(trimethoxysilyl)propylamine

Route of exposure Result Method		Method		Observation time	Species	Value determination	Remark
				point			
Skin	Not sensitizing	OECD 406	72 h		1 0	Experimental value	
					(male/female)		

Conclusion

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

Specific target organ toxicity

Fix All Crystal

No (test)data on the mixture available

Judgement is based on the relevant ingredients

 $\underline{\mathsf{trimethoxyvinylsilane}}$

Route of exposure	Paramet	ter	Method	Value	Organ	Effect	Exposure time		Value determination
Oral (stomach tube)	LOAEL			62.5 mg/kg bw/day		Histopathologic al changes		Rat (male)	Experimental value
Inhalation (vapours)	NOAEC		Subchronic toxicity test	10 ppm			14 weeks (6h/day, 5 days/week)		Experimental value

3-(trimethoxysilyl)propylamine

Route of exposure	Paramete	r Method	Value	Organ	Effect	Exposure time		Value determination
Oral (stomach tube)	LOAEL	OECD 408	600 mg/kg bw/day	Liver	Clinical signs; mortality; body weight; food consumption	92 day(s)	Rat (male/female)	Read-across
Oral (stomach tube)	NOAEL	OECD 408	200 mg/kg bw/day	Liver	No effect	92 day(s)	Rat (male/female)	Read-across
	IRT (inhala <mark>tio</mark> risk tes <mark>t)</mark>	Equivalent to OECD 412	147 mg/m³ air	Lungs	Lesions in larynx, trachea and lung	4 weeks (6h/day, 5 days/week)	Rat (male)	Read-across

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

Fix All Crystal

No (test)data on the mixture available

trimethoxyvinylsilane

Result	Method	Test substrate	Effect	Value determination
Positive with metabolic	OECD 473	CHL/IU cells	Chromosome aberrations	Experimental value
activation, positive without				
metabolic activation				

Reason for revision: 2;3 Publication date: 2011-07-19
Date of revision: 2017-09-26

Revision number: 0600 Product number: 51334 6 / 12

3-(tri	nethoxysilyl)propylamine	
_	•-	

-ttililetiloxysiiyi/pi opylaitiille						
Result	Method	Test substrate	Effect	Value determination		
Negative with metabolic activation, negative without metabolic activation	OECD 476	Chinese hamster ovary (CHO)	No effect	Read-across		
Negative with metabolic activation, negative without metabolic activation	OECD 473	Chinese hamster lung fibroblasts (V79)	No effect	Read-across		
Negative with metabolic activation, negative without metabolic activation	OECD 471	Escherichia coli	No effect	Experimental value		
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value		

Mutagenicity (in vivo)

Fix All Crysta

No (test)data on the mixture available

Judgement is based on the relevant ingredients

trimethoxyvinylsilane

Result	Meth	hod Exposure time		Test substrate	Organ	Value determination
Negative	EPA 5	660/6-83-001		Mouse (male/female)		Experimental value

3-(trimethoxysilyl)propylamine

Result		Method	Exposure time		Test substrate	Organ	Value determination
Negative		Equivalent to OECD			Mouse (male/female)	Bone marrow	Read-across
		474					

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

Fix All Crystal

No (test)data on the mixture available

Judgement is based on the relevant ingredients

3-(trimethoxysilyl)propylamine

Route of	Parameter	Method	Value Exposure time S		Species	Effect	Organ	Value
exposure								determination
Dermal	NOAEL	Carcinogenic	43.8 mg/week	104 weeks (3	Mouse	No carcinogenic	Skin	Inconclusive,
		toxicity study		times/week)	(male/female)	effect		insufficient data

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

Fix All Crystal

No (test)data on the mixture available

Judgement is based on the relevant ingredients

trimethoxyvinylsilane

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	EPA OTS 798.4350	100 ppm	10 days (gestation, 6h/day)	Rat (female)	No effect		Experimental value
Maternal toxicity	NOAEL	EPA OTS 798.4350	25 ppm	10 days (gestation, 6h/day)	Rat (female)	No effect		Experimental value
Effects on fertility	NOAEL (P)	OECD 422	1000 mg/kg bw/day	≤ 43 day(s)	Rat (male)	No effect		Experimental value

Reason for revision: 2;3 Publication date: 2011-07-19
Date of revision: 2017-09-26

Revision number: 0600 Product number: 51334 7 / 12

3-(trimethoxysilyl)propylamine

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	EPA OTS 798.4900	100 mg/kg bw/day	14 days (gestation, daily)	Rat	No effect		Read-across
	LOAEL	EPA OTS 798.4900	600 mg/kg bw/day	14 days (gestation, daily)	Rat	Minor skeletal variations	Skeleton	Read-across
Maternal toxicity	NOAEL	Other	100 mg/kg bw/day	14 day(s)	Rat	No effect		Read-across
	LOAEL	Other	600 mg/kg bw/day	14 day(s)	Rat	Clinical signs; mortality; body weight; food consumption	General	Read-across
Effects on fertility	NOAEL	OECD 408	600 mg/kg bw/day	92 day(s)	Rat (male/female)	No effect		Read-across

Conclusion

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

Fix All Crystal

No (test)data on the mixture available

Chronic effects from short and long-term exposure

Fix All Crystal

No effects known.

SECTION 12: Ecological information

12.1. Toxicity

Fix All Crystal

No (test)data on the mixture available

Judgement is based on the relevant ingredients

 $\underline{\mathsf{trimethoxyvinylsilane}}$

		Parameter	Method	Value	Duration	Species		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			EU Method C.2	168.7 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aqua plants	atic		EPA 67014- 73-0	210 mg/l	7 day(s)	Pseudokirchnerie lla subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity fish									Data waiving
Long-term toxicity aquatic crustacea		NOEC	OECD 211	28.1 mg/l	21 day(s)	1 1 1 1 1 1	Semi-static system	Fresh water	Experimental value; GLP

3-(trimethoxysilyl)propylamine

	F	Parameter	Method	Value	Duration	Species		Fresh/salt water	Value determination
Acute toxicity fishes	L	_C50	OECD 203	> 934 mg/l	96 h		Semi-static system	Fresh water	Read-across; GLP
Acute toxicity crustacea	E	C50	OECD 202	331 mg/l	48 h	Daphnia magna	Static system	Fresh water	Read-across; GLP
Toxicity algae and other aquati plants	ic E		EU Method C.3	> 1000 mg/l		Desmodesmus subspicatus	Static system	Fresh water	Read-across; GLP
Toxicity aquatic micro- organisms	E	C50	Other	43 mg/l		Pseudomonas putida	Static system	Fresh water	Read-across; GLP

Conclusion

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

12.2. Persistence and degradability

Reason for revision: 2;3 Publication date: 2011-07-19
Date of revision: 2017-09-26

Revision number: 0600 Product number: 51334 8 / 12

Fix	All	Crv	/stal
-----	-----	-----	-------

Method		Value		Duration		Value determination	
OECD 301F: Manometri	c Respirometry Test	51 %; GLP		28 day(s)		Experimental value	
Phototransformation air ((DT50 air)	1					
Method	,5 130 am y	Value		Conc. OH-radicals		Value determination	
		0.56 day(s)		500000 /cm ³		Calculated value	
Half-life water (t1/2 water	er)			Primary			
Method		Value	alue		ralisation	Value determination	
OECD 111: Hydrolysis as	a function of pH	< 2.4 h; pH = 7		Primary degradation		Weight of evidence	
-(trimethoxysilyl)propylam	<u>ine</u>						
Biodegradation water Method		Value		Duration		Value determination	
EU Method C.4		67 %; GLP		28 day(s)	_	Experimental value	
Half-life water (t1/2 water	er)	07 70, GLI		20 ddy(3)		Experimental value	
Method		Value		Primary		Value determination	
				degradation/mine			
		4 h; pH = 7		Primary degradation	n	QSAR	
nclusion		, ,					
ontains non readily biodeg	radable component(.S)					
.3. Bioaccumulative	notential						
II Crystal	poteritiai						
g Kow							
/lethod	Remark	Value		Temperatu	·e	Value determination	
	Not applicable (m	ixture)					
rimethoxyvinylsilane							
Log Kow							
Method	Remark	Va	lue	Temper	ature	Value determination	
KOWWIN	Calculated	-2		20 °C		QSAR	
-(trimethoxysilyl)propylam	<u>ine</u>						
Log Kow		L.					
Method	Remark	0.2	lue	Temperature 20 °C		Value determination QSAR	
nclusion		0.2		20 0		COAN	
Contains bioaccumulative co	omponent(s)						
2.4. Mobility in soil							
rimethoxyvinylsilane							
(log) Koc							
Parameter			Method		Value	Value determination	
						Data waiving	
Volatility (Henry's Law co							
Value	nstant H) Method		perature	Remark		Value determination	
		Tem 25 °0		Remark		Value determination Estimated value	
Value 8.72E-5 atm m³/mol				Remark			
Value 8.72E-5 atm m³/mol	Method	25 °(Remark			
Value 8.72E-5 atm m³/mol	Method	25 °(Remark			
Value 8.72E-5 atm m³/mol nclusion Contains component(s) that	Method adsorb(s) into the so	25°(oil ent				Estimated value	
value 8.72E-5 atm m³/mol nclusion Contains component(s) that 2.5. Results of PBT and Oue to insufficient data no s	Method t adsorb(s) into the so d vPvB assessmentatement can be ma	25°(oil ent			and vPvB a	Estimated value	
value 8.72E-5 atm m³/mol nclusion Contains component(s) that 2.5. Results of PBT and Oue to insufficient data no s	Method t adsorb(s) into the so d vPvB assessmentatement can be ma	25°(oil ent			and vPvB a	Estimated value	
value 8.72E-5 atm m³/mol contains component(s) that 2.5. Results of PBT and Due to insufficient data no segulation (EC) No 1907/20 2.6. Other adverse eff	Method t adsorb(s) into the so d vPvB assessme statement can be ma	25°(oil ent			and vPvB a	Estimated value	
Value 8.72E-5 atm m³/mol contains component(s) that 2.5. Results of PBT and Due to insufficient data no segulation (EC) No 1907/20 2.6. Other adverse effoll Crystal	Method t adsorb(s) into the so d vPvB assessmentatement can be mandle. fects	25 °(oil ent de whether the cor			and vPvB a	Estimated value	
Value 8.72E-5 atm m³/mol contains component(s) that 2.5. Results of PBT and Due to insufficient data no segulation (EC) No 1907/20 2.6. Other adverse effoliorystal Duerinated greenhouse gase	Method t adsorb(s) into the so d vPvB assessme statement can be ma 106. fects es (Regulation (EU) N	25 °(poil ent de whether the cor lo 517/2014)	nponent(s) ful	fil(s) the criteria of PBT		Estimated value ccording to Annex XIII of	
Value 8.72E-5 atm m³/mol contains component(s) that 2.5. Results of PBT and Due to insufficient data no segulation (EC) No 1907/20 2.6. Other adverse effoliorinated greenhouse gase one of the known compone	Method t adsorb(s) into the so d vPvB assessmentatement can be managed. fects (Regulation (EU) Nonts is included in the	25 °(poil ent de whether the cor lo 517/2014)	nponent(s) ful	fil(s) the criteria of PBT		Estimated value ccording to Annex XIII of	
Value 8.72E-5 atm m³/mol contains component(s) that 2.5. Results of PBT and Due to insufficient data no segulation (EC) No 1907/20 2.6. Other adverse effoliorinated greenhouse gase one of the known componence one-depleting potential (C	Method t adsorb(s) into the so d vPvB assessmentatement can be managed. fects ses (Regulation (EU) North is included in the DDP)	poil ent de whether the cor lo 517/2014) list of fluorinated g	nponent(s) ful	fil(s) the criteria of PBT		Estimated value ccording to Annex XIII of	
Value 8.72E-5 atm m³/mol contains Contains component(s) that 2.5. Results of PBT and Oue to insufficient data no s Regulation (EC) No 1907/20 2.6. Other adverse eff All Crystal Corinated greenhouse gase one of the known compone cone-depleting potential (Co ot classified as dangerous for	Method t adsorb(s) into the so d vPvB assessme statement can be ma 106. fects es (Regulation (EU) N 101 into the so 106 into the so 107 into the so 108 into the so 109 into	poil ent de whether the cor lo 517/2014) list of fluorinated g	nponent(s) ful	fil(s) the criteria of PBT		Estimated value ccording to Annex XIII of	
Value 8.72E-5 atm m³/mol 2.5. Results of PBT and Due to insufficient data no seegulation (EC) No 1907/20 2.6. Other adverse effull Crystal provinated greenhouse gase one of the known compone cone-depleting potential (Co) at classified as dangerous for activities and consumer to the cone-depleting potential (Co) at classified as dangerous for activities and consumer to the cone-depleting potential (Co) at classified as dangerous for activities and consumer to the cone-depleting potential (Co) at classified as dangerous for activities and consumer to the cone-depleting potential (Co) at classified as dangerous for activities and consumer to the cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (Co) at classified as dangerous for activities and cone-depleting potential (C	Method t adsorb(s) into the so d vPvB assessme statement can be ma 106. fects es (Regulation (EU) N 101 into the so 106 into the so 107 into the so 108 into the so 109 into	poil ent de whether the cor lo 517/2014) list of fluorinated g	nponent(s) ful	fil(s) the criteria of PBT		Estimated value ccording to Annex XIII of	
Value 8.72E-5 atm m³/mol Inclusion Contains component(s) that 2.5. Results of PBT and Oue to insufficient data no stegulation (EC) No 1907/20 2.6. Other adverse efful Crystal Incrinated greenhouse gase one of the known compone one-depleting potential (Cott classified as dangerous for 6-(trimethoxysilyl)propylam Groundwater	Method t adsorb(s) into the so d vPvB assessme statement can be ma 106. fects es (Regulation (EU) N 101 into the so 106 into the so 107 into the so 108 into the so 109 into	poil ent de whether the cor lo 517/2014) list of fluorinated g	nponent(s) ful	fil(s) the criteria of PBT		Estimated value ccording to Annex XIII of	
Value 8.72E-5 atm m³/mol nclusion Contains component(s) that 2.5. Results of PBT and Oue to insufficient data no stegulation (EC) No 1907/20 2.6. Other adverse effull Crystal Incrinated greenhouse gase one of the known compone one-depleting potential (Co out classified as dangerous for -(trimethoxysilyl)propylam	Method t adsorb(s) into the so d vPvB assessme statement can be ma 106. fects es (Regulation (EU) N 101 into the so 106 into the so 107 into the so 108 into the so 109 into	poil ent de whether the cor lo 517/2014) list of fluorinated g	nponent(s) ful	fil(s) the criteria of PBT		Estimated value ccording to Annex XIII of	
Value 8.72E-5 atm m³/mol nclusion Contains component(s) that 2.5. Results of PBT and the properties of the contains of the co	Method t adsorb(s) into the so d vPvB assessme statement can be ma 106. fects es (Regulation (EU) N 101 into the so 106 into the so 107 into the so 108 into the so 109 into	poil ent de whether the cor lo 517/2014) list of fluorinated g	nponent(s) ful	fil(s) the criteria of PBT		Estimated value ccording to Annex XIII of	
Value 8.72E-5 atm m³/mol nclusion Contains component(s) that 2.5. Results of PBT and the properties of the contains of the co	Method t adsorb(s) into the so d vPvB assessme statement can be ma 106. fects es (Regulation (EU) N 101 into the so 106 into the so 107 into the so 108 into the so 109 into	poil ent de whether the cor lo 517/2014) list of fluorinated g	nponent(s) ful	fil(s) the criteria of PB1	o 517/2014)	Estimated value ccording to Annex XIII of	

Revision number: 0600 Product number: 51334 9 / 12

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

Recycle/reuse. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery. Remove waste in accordance with local and/or national regulations. Do not discharge into drains or the environment.

13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC). 15 01 02 (plastic packaging).

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

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
6.99 % - 7.32 %		
73.60 g/l - 77.08 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 survey of Conditions of contribions
	Designation of the substance, of the group of Conditions of restriction
	substances or of the mixture
· trimethoxyvinylsilane	Liquid substances or mixtures which are 1. Shall not be used in:
· 3-(trimethoxysilyl)propylamine	regarded as dangerous in accordance with — ornamental articles intended to produce light or colour effects by means of different
	Directive 1999/45/EC or are fulfilling the phases, for example in ornamental lamps and ashtrays,
	criteria for any of the following hazard classes — tricks and jokes,
	or categories set out in Annex I to Regulation — games for one or more participants, or any article intended to be used as such, even with
	(EC) No 1272/2008: ornamental aspects,
	(a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 2. Articles not complying with paragraph 1 shall not be placed on the market.
	types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 3. Shall not be placed on the market if they contain a colouring agent, unless required for
	and 2, 2.14 categories 1 and 2, 2.15 types A to fiscal reasons, or perfume, or both, if they:
	F; — can be used as fuel in decorative oil lamps for supply to the general public, and,
	(b) hazard classes 3.1 to 3.6, 3.7 adverse — present an aspiration hazard and are labelled with R65 or H304,
	effects on sexual function and fertility or on 4. Decorative oil lamps for supply to the general public shall not be placed on the market
	development, 3.8 effects other than narcotic unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted
	effects, 3.9 and 3.10; by the European Committee for Standardisation (CEN).
	(c) hazard class 4.1; 5. Without prejudice to the implementation of other Community provisions relating to the
	(d) hazard class 5.1. classification, packaging and labelling of dangerous substances and mixtures,
ason for revision: 2;3	Publication date: 2011-07-19

Date of revision: 2017-09-26

Revision number: 0600 Product number: 51334 10 / 12

	· ···· ··· ··· ··· ··· ··· ··· ··· ···
· trimethoxyvinylsilane	suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with R65 or 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 R65 or 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 R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010. 6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public. 7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.' Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids categories 2, 2 or 3, flammable solids categories 2, 2 or 3, flammable solids categories 3, 2 or 3, flammable solids categories 4, 2 or 3, flammable solids categories 4, 2 or 3, flammable solids categories 5, 2 or 3, flammable solids categories 6,
	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. - "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.
National legislation Belgium	
<u>Fix All Crystal</u> No data available	
National legislation The Net	<u>herlands</u>
<u>Fix All Crystal</u> Waterbezwaarlijkheid	Z (1)
National legislation France	
Fix All Crystal No data available	
National legislation German Fix All Crystal	Y Control of the cont
WGK	1; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender
	Stoffe (VwVwS) of 27 July 2005 (Anhang 4)
trimethoxyvinylsilane TA-Luft	5.2.5
IA-Luπ 3-(trimethoxysilyl)propyl	
TA-Luft	5.2.5
National legislation United Fix All Crystal No data available	<u>(ingdom</u>
Other relevant data Fix All Crystal No data available	
3-(trimethoxysilyl)propyl	<mark>sment has been conducted for the mix</mark> ture.
Reason for revision: 2;3	Publication date: 2011-07-19 Date of revision: 2017-09-26
Revision number: 0600	Product number: 51234 11 / 12

Revision number: 0600 Product number: 51334 11/12

SECTION 16: Other information

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

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H373 May cause damage to organs (bladder) through prolonged or repeated exposure if swallowed.

(*) INTERNAL CLASSIFICATION BY BIG

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. Old versions must be destroyed. 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 has been elaborated for use within the European Union, Switzerland, Iceland, Norway and Lichtenstein. It may be consulted in other countries, where local legislation with regards to the set-up of safety data sheets will take precedence. It is your obligation to verify and apply such local legislation. 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.

Reason for revision: 2;3 Publication date: 2011-07-19
Date of revision: 2017-09-26

Revision number: 0600 Product number: 51334 12 / 12