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

1.1. Product identifier

Product form : Mixture
Trade name : Parabond Flex Seal F

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

1.2.1. Relevant identified uses

Main use category : Professional use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

DL CHEMICALS N.V.
Roterijstraat 201-203
B-8793 Waregem
Belgium
T + 32 56 62 70 51 - F + 32 56 60 95 68
MSDS@dl-chem.com - www.dl-chem.com

1.4. Emergency telephone number

Emergency number : + 32 56 62 70 51
Only available during office hours.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Contains trimethoxyvinylsilane, Dioctyltinbis(acetylacetonate), 3-(2-aminoethylamino)propyltrimethoxysilane. May produce an allergic reaction.	EUH208
Safety data sheet available on request.	EUH210
Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.	EUH211

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH208 - Contains trimethoxyvinylsilane, Dioctyltinbis(acetylacetonate), 3-(2-aminoethylamino)propyltrimethoxysilane. May produce an allergic reaction.
EUH210 - Safety data sheet available on request.
EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3. Other hazards

Mixture does not contain substance (s) classified as PBT or vPvB in concentrations above 0,1%.
Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
trimethoxyvinylsilane (2768-02-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Titanium dioxide (Note W)(Note 10)	CAS-No.: 13463-67-7 EC-No.: 236-675-5 EC Index-No.: 022-006-00-2 REACH-no: 01-2119489379-17	< 2,5	Carc. 2, H351
3-(trimethoxysilyl)propylamine	CAS-No.: 13822-56-5 EC-No.: 237-511-5 REACH-no: 01-2119510159-45	≥ 1 – < 2,5	Skin Irrit. 2, H315 Eye Dam. 1, H318
Dioctyltinbis(acetylacetonate)	CAS-No.: 54068-28-9 EC-No.: 483-270-6 REACH-no: 01-0000020199-67	≥ 0,1 – < 0,5	Skin Sens. 1, H317 STOT SE 2, H371
3-(2-aminoethylamino)propyltrimethoxysilane	CAS-No.: 1760-24-3 EC-No.: 217-164-6 REACH-no: 01-2119970215-39	≥ 0,1 – < 0,5	Eye Dam. 1, H318 Skin Sens. 1B, H317
trimethoxyvinylsilane	CAS-No.: 2768-02-7 EC-No.: 220-449-8 EC Index-No.: 014-049-00-0 REACH-no: 01-2119513215-52	≥ 0,1 – < 0,5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 (ATE=16,8 mg/l/4h) Skin Sens. 1B, H317

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits**
3-(trimethoxysilyl)propylamine	CAS-No.: 13822-56-5 EC-No.: 237-511-5 REACH-no: 01-2119510159-45	(2,5 ≤C < 100) Eye Irrit. 2, H319

Note 10 : The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm.
Note W : It has been observed that the carcinogenic hazard of this substance arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung. This note aims to describe the particular toxicity of the substance; it does not constitute a criterion for classification according to this Regulation.
Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Move to fresh air. If symptoms persist call a doctor. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : After contact with skin, wash immediately and thoroughly with water and soap. If irritation persists, consult a doctor. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth out with water. Seek medical advice (show the label where possible). Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Strong water jet. Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Precautionary measures fire	:	Do not breathe fumes from fires or vapours from decomposition. Evacuate unnecessary personnel. Exercise caution when fighting any chemical fire.
Firefighting instructions	:	Cool down the containers exposed to heat with a water spray. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	:	Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	:	Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	:	Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	:	Equip rescue crew with proper protection. Equip cleanup crew with proper protection.
Emergency procedures	:	Ventilate area.

6.2. Environmental precautions

Do not allow to enter drains or water courses. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	:	Cover spill with non combustible material, e.g.: sand, earth, vermiculite.
Methods for cleaning up	:	Sweep or shovel spills into appropriate container for disposal. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products	:	Strong bases. Strong acids.
Incompatible materials	:	Sources of ignition. Direct sunlight.
Storage area	:	Protect from freezing.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Titanium dioxide (13463-67-7)	
Ireland - Occupational Exposure Limits	
OEL STEL	10 mg/m³ inhalable dust 4 mg/m³ respirable dust
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	10 mg/m³ inhalable dust 4 mg/m³ respirable dust

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:
Avoid all unnecessary exposure.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Chemical goggles or safety glasses

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Safety glasses	Droplet	With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:
Light protective clothing

Hand protection:
Time of penetration is to be checked with the glove producer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear. Wear protective gloves.

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,1		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:
In case of inadequate ventilation wear respiratory protection. Wear appropriate mask

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
Full face mask	ABEK	Long term exposure, If conc. in air > exposure limit	

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Do not allow to enter drains or water courses.

Consumer exposure controls:
Avoid contact with skin and eyes. Do not eat, drink or smoke during work.

Other information:
Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Take off immediately all contaminated clothing. Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Colourless.
Appearance	:	Liquid.
Odour	:	characteristic.
Odour threshold	:	Not available
Melting point	:	Does not apply
Freezing point	:	Not applicable
Softening point	:	Not applicable
Boiling point	:	Not applicable.
Flammability	:	Non flammable.
Explosive properties	:	Product is not explosive.
Oxidising properties	:	Non oxidizing material according to EC criteria.
Explosive limits	:	Not available

Lower explosion limit	:	Not applicable.
Upper explosion limit	:	Not applicable
Flash point	:	> 100 °C (ISO 3679)
Auto-ignition temperature	:	≥ 235 °C (calculated value)
Decomposition temperature	:	Not applicable
pH	:	insoluble in water
Viscosity, kinematic	:	< 729,927 mm²/s
Viscosity, dynamic	:	< 1000 mPa.s (Brookfield spindle 96, 1 rpm)
Non-Newtonian liquid	:	Thixotropic behaviour
Solubility	:	Water: Insoluble
Partition coefficient n-octanol/water (Log Kow)	:	Not applicable for preparations
Partition coefficient n-octanol/water (Log Pow)	:	Not applicable for preparations
Vapour pressure	:	Not applicable.
Vapour pressure at 50°C	:	Not applicable
Density	:	1,37 g/cm³
Relative density	:	1,37
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

3-(trimethoxysilyl)propylamine	
Boiling point	190 °C
Flash point	90 °C

trimethoxyvinylsilane	
Boiling point	123 °C
Flash point	24,5 °C
Vapour pressure	11,9 hPa

Dioctyltinbis(acetylacetonate)	
Boiling point	226 °C
Flash point	89 °C Atm. press.: 1013 hPa
Auto-ignition temperature	420 °C
Vapour pressure	0,0017 Pa at 20 °C

Titanium dioxide	
Boiling point	3000 (2500 – 3000) °C

3-(2-aminoethylamino)propyltrimethoxysilane	
Boiling point	140 °C
Flash point	120 °C Atm. press.: 1013 hPa
Vapour pressure	0,4 Pa at 20 °C

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use. Not established.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

No decomposition if stored normally. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

3-(trimethoxysilyl)propylamine (13822-56-5)	
LD50 oral rat	5628 mg/kg
LD50 dermal rabbit	15800 mg/kg
LC50 Inhalation - Rat	476 mg/l/4h

trimethoxyvinylsilane (2768-02-7)	
LD50 oral rat	7236 mg/kg
LD50 dermal rabbit	3880 mg/kg
LC50 Inhalation - Rat [ppm]	2773 ppm/4h
LC50 Inhalation - Rat (Vapours)	16,8 mg/l/4h

Dioctyltinbis(acetylacetonate) (54068-28-9)	
LD50 oral rat	2500 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Titanium dioxide (13463-67-7)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)
LD50 dermal rat	> 10000 mg/kg
LD50 dermal rabbit	> 10000 mg/kg
LC50 Inhalation - Rat	> 6,82 mg/l
LC50 Inhalation - Rat (Dust/Mist)	> 6,82 mg/l/4h

3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)	
LD50 oral rat	2295 mg/kg
LD50 dermal rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity), Remarks on results: other:
LC50 Inhalation - Rat	1,49 – 2,44 mg/l air Animal: rat, Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity), Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation : Not classified
pH: insoluble in water
Additional information : Based on available data, the classification criteria are not met

Titanium dioxide (13463-67-7)	
pH	7

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: insoluble in water
Additional information : (OECD 437 method)
Based on available data, the classification criteria are not met

Titanium dioxide (13463-67-7)	
pH	7

Respiratory or skin sensitisation : Not classified
Additional information : Based on available data, the classification criteria are not met
Germ cell mutagenicity : Not classified
Additional information : Based on available data, the classification criteria are not met
Carcinogenicity : Not classified
Additional information : Based on available data, the classification criteria are not met
Reproductive toxicity : Not classified
Additional information : Based on available data, the classification criteria are not met
STOT-single exposure : Not classified
Additional information : Based on available data, the classification criteria are not met

Dioctyltinbis(acetylacetonate) (54068-28-9)	
STOT-single exposure	May cause damage to organs (immune system) (if swallowed).

STOT-repeated exposure : Not classified
Additional information : Based on available data, the classification criteria are not met

trimethoxyvinylsilane (2768-02-7)	
NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight/day

Dioctyltinbis(acetylacetonate) (54068-28-9)	
LOAEC (inhalation, rat, gas, 90 days)	650 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)	
NOAEL (oral, rat, 90 days)	≥ 500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (dermal, rat/rabbit, 90 days)	≥ 1545 mg/kg bodyweight Animal: rat

Aspiration hazard : Not classified
Additional information : Based on available data, the classification criteria are not met

Parabond Flex Seal F	
Viscosity, kinematic	< 729,927 mm²/s

3-(trimethoxysilyl)propylamine (13822-56-5)	
Viscosity, kinematic	1,7 mm²/s at 20 °C

trimethoxyvinylsilane (2768-02-7)	
Viscosity, kinematic	1,031 mm²/s

Dioctyltinbis(acetylacetonate) (54068-28-9)	
Viscosity, kinematic	25,1 mm²/s Temp.: '40°C' Parameter: 'kinematic viscosity (in mm²/s)'

3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)	
Viscosity, kinematic	3,1 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

11.2.2. Other information

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

trimethoxyvinylsilane (2768-02-7)	
LC50 - Fish [1]	191 mg/l
EC50 - Crustacea [1]	167 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	> 957 mg/l
ErC50 algae	> 100 mg/l (OECD 201 method)
NOEC chronic crustacea	28,1 mg/l
NOEC chronic algae	25 mg/l

Dioctyltinbis(acetylacetonate) (54068-28-9)	
LC50 - Fish [1]	86 mg/l (OECD 203 method)
EC50 - Crustacea [1]	58,6 mg/l (OECD 202 method)
EC50 - Other aquatic organisms [1]	75 mg/l Test organisms (species): other:
EC50 72h - Algae [1]	300 mg/l Scenedesmus subspicatus

Titanium dioxide (13463-67-7)	
LC50 - Fish [1]	155 mg/l Test organisms (species): other:Japanese Medaka
LC50 - Fish [2]	> 10000 mg/l
EC50 - Crustacea [1]	19,3 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	27,8 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	> 1000 mg/l
EC50 - Other aquatic organisms [2]	61 mg/l
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	> 100 mg/l pseudokirchneriella subcapitata
NOEC (chronic)	≥ 2,92 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic algae	5600 mg/l

3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)	
LC50 - Fish [1]	597 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	81 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	126 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	352 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

12.2. Persistence and degradability

Parabond Flex Seal F	
Persistence and degradability	May cause long-term adverse effects in the environment.

trimethoxyvinylsilane (2768-02-7)	
Biodegradation	51 %

Titanium dioxide (13463-67-7)	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

Parabond Flex Seal F	
Partition coefficient n-octanol/water (Log Pow)	Not applicable for preparations
Partition coefficient n-octanol/water (Log Kow)	Not applicable for preparations
Bioaccumulative potential	Not established.

3-(trimethoxysilyl)propylamine (13822-56-5)	
Partition coefficient n-octanol/water (Log Pow)	0,2
Bioaccumulative potential	Low bioaccumulation potential.

Titanium dioxide (13463-67-7)	
BCF - Fish [1]	352

12.4. Mobility in soil

Dioctyltinbis(acetylacetonate) (54068-28-9)	
Surface tension	32,3 mN/m at 20 °C

12.5. Results of PBT and vPvB assessment

Parabond Flex Seal F
Mixture does not contain substance (s) classified as PBT or vPvB in concentrations above 0,1%.

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

ADR	IMDG	IATA	ADN	RID
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals): dioctylbis(pentane-2,4-dionato-O,O')tin (54068-28-9)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:
Physical and chemical properties. Regulatory information.

Abbreviations and acronyms:	
CAS-No.	Chemical Abstract Service number
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration factor
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
LOAEL	Lowest Observed Adverse Effect Level
LD50	Median lethal dose
LC50	Median lethal concentration
IOELV	Indicative Occupational Exposure Limit Value
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
vPvB	Very Persistent and Very Bioaccumulative
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
ATE	Acute Toxicity Estimate
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
SDS	Safety Data Sheet

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Carc. 2	Carcinogenicity, Category 2
EUH208	Contains trimethoxyvinylsilane, Dioctyltinbis(acetylacetonate), 3-(2-aminoethylamino)propyltrimethoxysilane. May produce an allergic reaction.
EUH210	Safety data sheet available on request.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H371	May cause damage to organs.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 2	Specific target organ toxicity – Single exposure, Category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
EUH208	EUH208	Calculation method
EUH210	EUH210	Calculation method
EUH211	EUH211	On basis of test data

SDS EU DL Chemicals

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.