

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixtures
Trade name : Parabond Flex Seal G

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

1.4. Emergency telephone number

Emergency number : + 32 70 245 245

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

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

Skin corrosion/irritation Not classified

Serious eye damage/eye irritation Not classified

Sensitisation — Skin, Category 1 H317

Full text of hazard classes and H-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]

Hazard pictograms (CLP) :



GHS07

CLP Signal word : Warning

Hazardous ingredients : Diocetyl tinbis(acetylacetonate); 3-aminopropyltriethoxysilane; 3-(2-aminoethylamino)propyltrimethoxysilane; Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Hazard statements (CLP) : H317 - May cause an allergic skin reaction

Precautionary statements (CLP) : P261 - Avoid breathing vapours
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves, eye protection
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P321 - Specific treatment (see supplemental first aid instruction on this label)
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

2.3. Other hazards

No additional information available

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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]
vinyltrimethoxysilane	(CAS No) 2768-02-7 (EC No) 220-449-8 (REACH-no) 01-2119513215-52	2,5 - 5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373
Titanium dioxide substance with a Community workplace exposure limit	(CAS No) 13463-67-7 (EC No) 236-675-5 (REACH-no) 01-2119489379-17	1 - 2,5	Not classified
3-aminopropyltriethoxysilane	(CAS No) 919-30-2 (EC No) 213-048-4 (EC Index No) 612-108-00-0 (REACH-no) 01-2119480479-24	1 - 2,5	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Skin Sens. 1, H317
Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	(EC No) 915-687-0 (REACH-no) 01-2119491304-40	0,1 - 1	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 (M=0)
Diocetyl tinbis(acetylacetonate)	(CAS No) 54068-28-9 (EC No) 483-270-6	0,1 - 1	Skin Sens. 1, H317 Repr. 2, H361 STOT RE 2, H373 Aquatic Chronic 3, H412
3-(2-aminoethylamino)propyltrimethoxysilane	(CAS No) 1760-24-3 (EC No) 217-164-6 (REACH-no) 01-2119970215-39	0,1 - 1	Acute Tox. 4 (Inhalation: dust, mist), H332 Eye Dam. 1, H318 Skin Sens. 1, H317
methanol	(CAS No) 67-56-1 (EC No) 200-659-6 (EC Index No) 603-001-00-X (REACH-no) 01-2119433307-44	0,1 - 1	Flam. Liq. 2, H225 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Oral), H301 STOT SE 1, H370

Specific concentration limits:

Name	Product identifier	Specific concentration limits
3-(2-aminoethylamino)propyltrimethoxysilane	(CAS No) 1760-24-3 (EC No) 217-164-6 (REACH-no) 01-2119970215-39	(C >= 3) Eye Dam. 1, H318 (C >= 3) Skin Sens. 1, H317
methanol	(CAS No) 67-56-1 (EC No) 200-659-6 (EC Index No) 603-001-00-X (REACH-no) 01-2119433307-44	(3 <= C < 10) STOT SE 2, H371 (C >= 10) STOT SE 1, H370

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Move to fresh air. If symptoms persist call a doctor.
- First-aid measures after skin contact : After contact with skin, wash immediately and thoroughly with water and soap. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- First-aid measures after ingestion : Rinse mouth out with water. Seek medical advice (show the label where possible).

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

No additional information available

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

No additional information available

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SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media : Strong water jet.

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.
Protection during firefighting : Wear a self contained breathing apparatus.
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 cleanup crew with proper protection. Equip rescue crew with proper protection.

6.2. Environmental precautions

Do not allow into drains or water courses.

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. Collect all waste in suitable and labelled containers and dispose according to local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes.
Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Store in tightly closed, properly ventilated containers away from heat, sparks, open flame.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Titanium dioxide (13463-67-7)		
EU	Local name	Titanium dioxide
EU	Notes	SCOEL Recommendations (Ongoing)
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ inhalable dust 4 mg/m ³ respirable dust
silica (7631-86-9/112945-52-5)		
United Kingdom	WEL TWA (mg/m ³)	6 mg/m ³ inhalable dust 2,4 mg/m ³ respirable dust
tetramethyl orthosilicate (681-84-5)		
United Kingdom	WEL TWA (mg/m ³)	6,3 mg/m ³
United Kingdom	WEL TWA (ppm)	1 ppm
United Kingdom	WEL STEL (mg/m ³)	32 mg/m ³
United Kingdom	WEL STEL (ppm)	5 ppm

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methanol (67-56-1)		
EU	Local name	Methanol
EU	IOELV TWA (mg/m ³)	260 mg/m ³
EU	IOELV TWA (ppm)	200 ppm
EU	Notes	skin
EU	Skin	
United Kingdom	WEL TWA (mg/m ³)	266 mg/m ³
United Kingdom	WEL TWA (ppm)	200 ppm
United Kingdom	WEL STEL (mg/m ³)	333 mg/m ³
United Kingdom	WEL STEL (ppm)	250 ppm
Silane, dichlorodimethyl-, reaction products with silica (68611-44-9)		
United Kingdom	WEL TWA (mg/m ³)	6 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	2,4 mg/m ³
calcium carbonate (471-34-1)		
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ inhalable dust 4 mg/m ³ respirable dust

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

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

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

Eye protection:

Type	Use	Characteristics	Standard
Safety glasses	Droplet	With side shields	EN 166

Skin and body protection:

Light protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection

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



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. Remove/Take off immediately all contaminated clothing. Handle in accordance with good industrial hygiene and safety procedures.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Paste.
Colour	: According to product specification.
Density	: 1,4 g/cm ³
Solubility	: Water: Insoluble

9.2. Other information

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.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No decomposition if stored normally.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Diocetyl tin bis(acetylacetonate) (54068-28-9)	
LD50 oral rat	2500 mg/kg
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)
Titanium dioxide (13463-67-7)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 10000 mg/kg
LC50 inhalation rat (mg/l)	3,43 mg/l
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 6,82 mg/l/4h
methanol (67-56-1)	
LD50 oral rat	5600 mg/kg
LD50 oral	1187 - 2769 mg/kg
LD50 dermal rabbit	15800 - 17100 mg/kg
LC50 inhalation rat (ppm)	64000 ppm/4h
LC50 inhalation rat (Vapours - mg/l/4h)	128,2 mg/l/4h
3-aminopropyltriethoxysilane (919-30-2)	
LD50 oral rat	2,69 mg/kg male
LC50 inhalation rat (ppm)	> 5 ppm male
3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)	
LD50 oral rat	2413 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	1,49 - 2,44 mg/l
vinyltrimethoxysilane (2768-02-7)	
LD50 oral rat	7120 mg/kg
LD50 dermal rabbit	3540 mg/kg
LC50 inhalation rat (mg/l)	16,79 mg/l/4h
LC50 inhalation rat (ppm)	2773 ppm/4h (OECD 403 method)
LC50 inhalation rat (Dust/Mist - mg/l/4h)	16,8 mg/l/4h

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Skin corrosion/irritation	: Not classified. (Based on available data, the classification criteria are not met)
Additional information	: (OECD 439 method)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (OECD 437 method)
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

3-aminopropyltriethoxysilane (919-30-2)	
NOAEL (chronic, oral, animal/male, 2 years)	> 43,8 mg/kg bodyweight

Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

3-aminopropyltriethoxysilane (919-30-2)	
LOAEL (oral, rat, 90 days)	600 mg/kg bodyweight/day
NOAEL (subchronic, oral, animal/male, 90 days)	200 mg/kg bodyweight

vinyltrimethoxysilane (2768-02-7)	
LOAEL (oral, rat, 90 days)	10 - 100 mg/kg bodyweight/day

Aspiration hazard	: Not classified
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SECTION 12: Ecological information

12.1. Toxicity

Diocetylbinbis(acetylacetonate) (54068-28-9)	
LC50 fish 1	96h 86 mg/l (OECD 203 method)
EC50 Daphnia 1	48h 58,6 mg/l (OECD 202 method)
EC50 other aquatic organisms 1	300 mg/l (OECD 201 method)
ErC50 (algae)	24h 3000 mg/l Scenedesmus subspicatus

Titanium dioxide (13463-67-7)	
LC50 fish 1	> 1000 mg/l
LC50 fish 2	> 10000 mg/l
EC50 Daphnia 1	2 mg/l
EC50 other aquatic organisms 1	> 10000 mg/l
EC50 other aquatic organisms 2	61 mg/l
NOEC (chronic)	0,01 mg/l rat
NOEC chronic algae	56000 mg/l

methanol (67-56-1)	
LC50 fish 1	15400 mg/l Lepomis macrochirus
EC50 Daphnia 1	> 10000 mg/l
EC50 96h algae (1)	22000 mg/l Selenastrum capricornutum
EC50 96h algae (2)	22000 mg/l Pseudokirchneriella subcapitata
ErC50 (algae)	16912 mg/l ulva pertusa
NOEC chronic fish	7900 mg/l Oryzias latipes

3-aminopropyltriethoxysilane (919-30-2)	
LC50 fish 1	> 100 mg/l Brachydanio rerio (zebra-fish)
EC50 Daphnia 1	> 100 mg/l Daphnia magna (Big water flea)
EC50 72h algae (1)	> 100 mg/l Pseudokirchneriella subcapitata
NOEC chronic algae	72h 1,3 mg/l Desmodesmus subspicatus.

vinyltrimethoxysilane (2768-02-7)	
LC50 fish 1	191 mg/l
EC50 Daphnia 1	168,7 mg/l
EC50 72h algae (1)	> 957 mg/l
ErC50 (algae)	> 100 mg/l (OECD 201 method)
NOEC chronic fish	>= 100 mg/l
NOEC chronic crustacea	28 mg/l
NOEC chronic algae	957 mg/l

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3-(2-aminoethylamino)propyltrimethoxysilane (1760-24-3)	
LC50 fish 1	168 mg/l
EC50 Daphnia 1	87,4 mg/l
EC50 72h algae (1)	1 - 10 mg/l

12.2. Persistence and degradability

Titanium dioxide (13463-67-7)	
Persistence and degradability	Not readily biodegradable.
methanol (67-56-1)	
Persistence and degradability	Readily biodegradable.
3-aminopropyltriethoxysilane (919-30-2)	
Persistence and degradability	Not readily biodegradable. Hydrolysis in water.
Biodegradation	28d 67 % (OECD 301A method)

12.3. Bioaccumulative potential

methanol (67-56-1)	
Bioconcentration factor (BCF REACH)	< 10
Log Pow	-0,77
Bioaccumulative potential	Low bioaccumulation potential.
3-aminopropyltriethoxysilane (919-30-2)	
Bioconcentration factor (BCF REACH)	3,4 Cyprinus carpio (Common Carp)
Bioaccumulative potential	not bioaccumulative.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
 Waste treatment methods : Dispose of at a licensed waste collection centre.
 Product/Packaging disposal recommendations : Empty the packaging completely prior to disposal. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.

SECTION 14: Transport information

In accordance with ADR

ADR	
14.1. UN number	
Not applicable	
14.2. UN proper shipping name	
Not applicable	
Not applicable	
14.3. Transport hazard class(es)	
Not applicable	
Not applicable	
14.4. Packing group	
Not applicable	
14.5. Environmental hazards	
Not applicable	
No supplementary information available	

14.6. Special precautions for user

- Overland transport
 Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out

methanol

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation: dust,mist)	Acute toxicity (inhalation: dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Dam./Irrit. Not classified	Serious eye damage/eye irritation Not classified
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Corr./Irrit. Not classified	Skin corrosion/irritation Not classified
Skin Sens. 1	Sensitisation — Skin, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 1	Specific target organ toxicity — single exposure, Category 1
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H331	Toxic if inhaled
H332	Harmful if inhaled
H361	Suspected of damaging fertility or the unborn child
H370	Causes damage to organs
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

MSDS Reach Annex II DL-Chem

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