

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.03.2025

Version number 39 (replaces version 38)

Revision: 21.03.2025

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

- **1.1 Product identifier**
- **Trade name:** GRF PM FIX&SEAL EXP WH CQ 425G*12 L197
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Adhesive
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Bison International
Dr.A.F.Philipsstraat 9
NL-4462 EW Goes
PO Box 160
NL-4460 AD Goes
tel. +31 88 3235700
fax. +31 88 3235800
e mail: sds@boltonadhesives.com
- **Further information obtainable from:** PSRA
- **1.4 Emergency telephone number:**
National Poisons Information Centre: +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week)
Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified, according to the CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Additional information:**
EUH208 Contains trimethoxyvinylsilane. May produce an allergic reaction.
EUH210 Safety data sheet available on request.
- **2.3 Other hazards** During curing methanol (CAS 67-56-1) is produced.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Adhesive

· **Dangerous components:**

| | | |
|--------------------------------|--|---------|
| CAS: 2768-02-7 | trimethoxyvinylsilane | 2.5-10% |
| EINECS: 220-449-8 | ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H332; Skin | |
| Index number: 014-049-00-0 | Sens. 1B, H317 | |
| Reg.nr.: 01-2119513215-52-XXXX | | |

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| | | |
|--|---|--------|
| CAS: 13822-56-5 EINECS: 237-511-5 Reg.nr.: 01-2119510159-45-XXXX | 3-(trimethoxysilyl)propylamine ☠ Eye Dam. 1, H318; ☠ Skin Irrit. 2, H315 | 1-2.5% |
| CAS: 52829-07-9 EINECS: 258-207-9 Reg.nr.: 01-2119537297-32-XXXX | bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate ☠ Repr. 2, H361f; ☠ Eye Dam. 1, H318; ☠ Aquatic Acute 1, H400; ☠ Aquatic Chronic 2, H411 | <0.25% |

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
No special measures required.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**
No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Send for recovery or disposal in suitable receptacles.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Storage class:** 12
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs

2768-02-7 trimethoxyvinylsilane

| | | |
|------------|---|---------------------------------|
| Oral | Consumer, oral, longterm exposition | 0.3 mg/kg bw/day |
| Dermal | Worker, dermal, longterm exposition | 3.9 mg/kg bw/day (rat) |
| | Consumer, dermal, longterm exposition | 7.8 mg/kg bw/day (rat) |
| Inhalative | Worker, inhalative, longterm exposition | 27.6 mg/m ³ (rat) |
| | Consumer, inhalative, longterm exposition | 6.7 mg/m ³ (rat) |
| | | 18.9 mg/m ³ (rabbit) |

13822-56-5 3-(trimethoxysilyl)propylamine

| | | |
|------------|---|-----------------------|
| Dermal | Worker, dermal, longterm exposition | 1 mg/kg bw/day |
| | Consumer, dermal, longterm exposition | 0.5 mg/kg bw/day |
| Inhalative | Worker, inhalative, longterm exposition | 7.1 mg/m ³ |
| | Consumer, inhalative, longterm exposition | 1.7 mg/m ³ |

52829-07-9 bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate

| | | |
|------------|---|------------------------|
| Oral | Consumer, oral, longterm exposition | 0.18 mg/kg bw/day |
| Dermal | Worker, dermal, longterm exposition | 1.8 mg/kg bw/day |
| | Consumer, dermal, longterm exposition | 0.9 mg/kg bw/day |
| Inhalative | Worker, inhalative, longterm exposition | 1.27 mg/m ³ |
| | Consumer, inhalative, longterm exposition | 0.31 mg/m ³ |

· PNECs

2768-02-7 trimethoxyvinylsilane

| | |
|----------------------|----------------------|
| Fresh water | 0.4 mg/l |
| Fresh water sediment | 1.5 mg/kg dry weight |

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| | |
|---|-----------------------|
| Marine water | 0.04 mg/l |
| Marine sediment | 0.15 mg/kg dry weight |
| Soil | 0.06 mg/kg |
| Sewage treatment plant | 6.6 mg/l |
| Sporadic release | 2.4 mg/l |
| 13822-56-5 3-(trimethoxysilyl)propylamine | |
| Fresh water | 0.5 mg/l |
| Fresh water sediment | 1.8 mg/kg dry weight |
| Marine water | 0.05 mg/l |
| Marine sediment | 0.18 mg/kg dry weight |
| Soil | 0.069 mg/kg |
| Sewage treatment plant | 0.81 mg/l |
| 52829-07-9 bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate | |
| Fresh water | 0.018 mg/l |
| Fresh water sediment | 29 mg/kg dry weight |
| Marine water | 0.0018 mg/l |
| Marine sediment | 2.9 mg/kg dry weight |
| Soil | 5.9 mg/kg |
| Sewage treatment plant | 1 mg/l |
| Sporadic release | 0.007 mg/l |

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

· **Respiratory protection:** Not necessary if room is well-ventilated.

· **Hand protection**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Recommended thickness of the material: > 0,12 mm

Nitrile rubber, NBR

· **Penetration time of glove material**

For the mixture of chemicals mentioned below the penetration time has to be at least 10 minutes (Permeation according to EN 374 Part 3: Level 1).

· **Eye/face protection** Goggles recommended during refilling

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|-----------------------------------|
| · General Information | |
| · Physical state | Fluid |
| · Colour: | White |
| · Odour: | Recognisable |
| · Odour threshold: | Not determined. |
| · Melting point/freezing point: | Undetermined. |
| · Boiling point or initial boiling point and boiling range | Undetermined. |
| · Flammability | Not applicable. |
| · Lower and upper explosion limit | |
| · Lower: | Not determined. |
| · Upper: | Not determined. |
| · Flash point: | Not applicable. |
| · Decomposition temperature: | Not determined. |
| · pH | Not determined. |
| · Viscosity: | |
| · Kinematic viscosity | Not determined. |
| · Dynamic: | Not determined. |
| · Solubility | |
| · water: | Not miscible or difficult to mix. |
| · Partition coefficient n-octanol/water (log value) | Not determined. |
| · Vapour pressure: | Not determined. |
| · Density and/or relative density | |
| · Density: | Not determined. |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |

· 9.2 Other information All relevant physical data were determined for the mixture. All non-determined data are not measurable or not relevant for the characterization of the mixture.

| | |
|---|---|
| · Appearance: | |
| · Form: | Pasty |
| · Important information on protection of health and environment, and on safety. | |
| · Ignition temperature: | Product is not selfigniting. |
| · Explosive properties: | Product does not present an explosion hazard. |
| · Solvent content: | |
| · Organic solvents: | 0.0 % |
| · VOC (EC) | 0.01 % |
| · Solids content: | 75.8 % |
| · Change in condition | |
| · Evaporation rate | Not determined. |

Information with regard to physical hazard classes

| | |
|--------------|------|
| · Explosives | Void |
|--------------|------|

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| | |
|---|------|
| · Flammable gases | Void |
| · Aerosols | Void |
| · Oxidising gases | Void |
| · Gases under pressure | Void |
| · Flammable liquids | Void |
| · Flammable solids | Void |
| · Self-reactive substances and mixtures | Void |
| · Pyrophoric liquids | Void |
| · Pyrophoric solids | Void |
| · Self-heating substances and mixtures | Void |
| · Substances and mixtures, which emit flammable gases in contact with water | Void |
| · Oxidising liquids | Void |
| · Oxidising solids | Void |
| · Organic peroxides | Void |
| · Corrosive to metals | Void |
| · Desensitised explosives | Void |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Possible in traces.
- **Additional information:** During curing methanol (CAS 67-56-1) is produced.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

2768-02-7 trimethoxyvinylsilane

| | | |
|------------|----------|---------------------|
| Oral | LD50 | 6899 mg/kg (rat) |
| Dermal | LD50 | 3158 mg/kg (rabbit) |
| Inhalative | LC50/4 h | 16.8 mg/l (rat) |

13822-56-5 3-(trimethoxysilyl)propylamine

| | | |
|--------|------|----------------------|
| Oral | LD50 | 3030 mg/kg (rat) |
| Dermal | LD50 | 10000 mg/kg (rabbit) |

52829-07-9 bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate

| | | |
|--------|------|-------------------|
| Oral | LD50 | 3700 mg/kg (rat) |
| Dermal | LD50 | >3170 mg/kg (rat) |

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Inhalative LC50/4 h 7.7 mg/l (rat)

· **Primary irritant effect:**

· **Skin corrosion/irritation**

| Component | CAS No. | Method | Species | Conclusion |
|-----------------------|-----------|--------------|---------------|------------------|
| Vinyltrimethoxysilane | 2768-02-7 | OECD No. 429 | mouse, dermal | no sensitisation |

· **Serious eye damage/irritation**

| Component | CAS No. | Method | Species | Conclusion |
|--------------------------------|------------|---------------|-------------|----------------------|
| 3-Aminopropyl trimethoxysilane | 13822-56-5 | BCOP OECD 437 | cattle, eye | no ocular irritation |

· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

· **Germ cell mutagenicity**

Not applicable.

Based on available data, the classification criteria are not met.

· **Carcinogenicity** Based on available data, the classification criteria are not met.

· **Reproductive toxicity** Based on available data, the classification criteria are not met.

· **STOT-single exposure** Based on available data, the classification criteria are not met.

· **STOT-repeated exposure** Based on available data, the classification criteria are not met.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

· **Additional toxicological information:**

· **Acute effects (acute toxicity, irritation and corrosivity)** Not applicable.

· **Sensitisation** Not applicable.

· **Repeated dose toxicity** Not applicable.

· **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**

· **Additional ecological information:**

· **General notes:**

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

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SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

· **Uncleaned packaging:**

· **Recommendation:**

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

· **14.1 UN number or ID number**

· **ADR/ADN, IMDG, IATA**

not regulated

-

· **ADN**

not regulated

· **14.2 UN proper shipping name**

· **ADR/ADN, ADN, IMDG, IATA**

not regulated

· **14.3 Transport hazard class(es)**

· **ADR/ADN, ADN, IMDG, IATA**

· **Class**

not regulated

· **14.4 Packing group**

· **ADR/ADN, IMDG, IATA**

not regulated

· **14.5 Environmental hazards:**

· **Marine pollutant:**

No

· **14.6 Special precautions for user**

Not applicable.

· **14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

· **Transport/Additional information:**

Not dangerous according to the above specifications.

· **UN "Model Regulation":**

not regulated

SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

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· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148**· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

- H226 Flammable liquid and vapour.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H361f Suspected of damaging fertility.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.

· Department issuing SDS: PSRA**· Contact:** PSRA**· Date of previous version:** 30.07.2021**· Version number of previous version:** 38**· Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

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Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1B: Skin sensitisation – Category 1B

Repr. 2: Reproductive toxicity – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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