

**Safety data sheet**  
according to Regulation (EC) No 1907/2006, Article 31

Printing date 25.07.2024

Version number 37 (replaces version 36)

Revision: 25.07.2024

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

- **1.1 Product identifier**
- **Trade name:** GRF PM PRO POWER WH CQ 425G\*12 L221
- **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 N-(3-(trimethoxysilyl)propyl)ethylenediamine, 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	
Reg.nr.: 01-2119513215-52		

(Contd. on page 2)

## Safety data sheet

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**Trade name:** GRF PM PRO POWER WH CQ 425G\*12 L221

(Contd. of page 1)

CAS: 13463-67-7 EINECS: 236-675-5 Index number: 022-006-00-2 Reg.nr.: 01-2119489379-17	titanium dioxide ☠ Carc. 2, H351, EUH212	<1%
CAS: 1760-24-3 EINECS: 217-164-6 Reg.nr.: 01-2119970215-39	N-(3-(trimethoxysilyl)propyl)ethylenediamine ☠ Eye Dam. 1, H318; ☠ Skin Sens. 1, H317; STOT SE 3, H335	≥0.1-<1%
CAS: 2768-02-7 EINECS: 220-449-8 Index number: 014-049-00-0 Reg.nr.: 01-2119513215-52	trimethoxyvinylsilane ☠ Flam. Liq. 3, H226; ☠ Acute Tox. 4, H332; Skin Sens. 1B, H317	≥0.1-<1%
CAS: 52829-07-9 EINECS: 258-207-9 Reg.nr.: 01-2119537297-32	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).

(Contd. on page 3)

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**Trade name:** GRF PM PRO POWER WH CQ 425G\*12 L221

(Contd. of page 2)

**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.
- See Section 13 for disposal information.

**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:** 10
- 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 (rat)
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 <sup>3</sup> (rat)
	Consumer, inhalative, longterm exposition	6.7 mg/m <sup>3</sup> (rat)
		18.9 mg/m <sup>3</sup> (rabbit)

**2768-02-7 trimethoxyvinylsilane**

Oral	Consumer, oral, longterm exposition	0.3 mg/kg bw/day (rat)
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 <sup>3</sup> (rat)
	Consumer, inhalative, longterm exposition	6.7 mg/m <sup>3</sup> (rat)
		18.9 mg/m <sup>3</sup> (rabbit)

**PNECs**

**2768-02-7 trimethoxyvinylsilane**

Fresh water	0.4 mg/l (rat)
Fresh water sediment	1.5 mg/kg dry weight (rat)

(Contd. on page 4)

**Safety data sheet**  
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Version number 37 (replaces version 36)

Revision: 25.07.2024

**Trade name:** GRF PM PRO POWER WH CQ 425G\*12 L221

(Contd. of page 3)

Marine water	0.04 mg/l (rat)
Marine sediment	0.15 mg/kg dry weight (rat)
Soil	0.06 mg/kg (rat)
Sewage treatment plant	6.6 mg/l (rat)
Sporadic release	2.4 mg/l (rat)
<b>2768-02-7 trimethoxyvinylsilane</b>	
Fresh water	0.4 mg/l (rat)
Fresh water sediment	1.5 mg/kg dry weight (rat)
Marine water	0.04 mg/l (rat)
Marine sediment	0.15 mg/kg dry weight (rat)
Soil	0.06 mg/kg (rat)
Sewage treatment plant	6.6 mg/l (rat)
Sporadic release	2.4 mg/l (rat)

· **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

**SECTION 9: Physical and chemical properties**

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Physical state**

Fluid

· **Colour:**

According to product specification

· **Odour:**

Characteristic

· **Odour threshold:**

Not determined.

· **Melting point/freezing point:**

Undetermined.

· **Boiling point or initial boiling point and boiling range**

Undetermined.

(Contd. on page 5)

## Safety data sheet

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

Printing date 25.07.2024

Version number 37 (replaces version 36)

Revision: 25.07.2024

Trade name: GRF PM PRO POWER WH CQ 425G\*12 L221

(Contd. of page 4)

<ul style="list-style-type: none"> <li>· <b>Flammability</b></li> <li>· <b>Lower and upper explosion limit</b></li> <li>· <b>Lower:</b></li> <li>· <b>Upper:</b></li> <li>· <b>Flash point:</b></li> <li>· <b>Decomposition temperature:</b></li> <li>· <b>pH</b></li> <li>· <b>Viscosity:</b></li> <li>· <b>Kinematic viscosity</b></li> <li>· <b>Dynamic:</b></li> <li>· <b>Solubility</b></li> <li>· <b>water:</b></li> <li>· <b>Partition coefficient n-octanol/water (log value)</b></li> <li>· <b>Vapour pressure:</b></li> <li>· <b>Density and/or relative density</b></li> <li>· <b>Density at 20 °C:</b></li> <li>· <b>Relative density</b></li> <li>· <b>Vapour density</b></li> </ul>	<p>Not applicable.</p> <p>Not determined.</p> <p>Not determined.</p> <p>237 °C</p> <p>Not determined.</p> <p>Not determined.</p> <p>Not determined.</p> <p>Not determined.</p> <p>Not miscible or difficult to mix.</p> <p>Not determined.</p> <p>Not determined.</p> <p>~1.946 g/cm<sup>3</sup></p> <p>Not determined.</p> <p>Not determined.</p>
<ul style="list-style-type: none"> <li>· <b>9.2 Other information</b></li> <li>· <b>Appearance:</b></li> <li>· <b>Form:</b></li> <li>· <b>Important information on protection of health and environment, and on safety.</b></li> <li>· <b>Ignition temperature:</b></li> <li>· <b>Explosive properties:</b></li> <li>· <b>Solvent content:</b></li> <li>· <b>Organic solvents:</b></li> <li>· <b>Solids content:</b></li> <li>· <b>Change in condition</b></li> <li>· <b>Evaporation rate</b></li> </ul>	<p>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.</p> <p>Fluid</p> <p>Product is not selfigniting.</p> <p>Product does not present an explosion hazard.</p> <p>0.0 %</p> <p>67.5 %</p> <p>Not determined.</p>
<ul style="list-style-type: none"> <li>· <b>Information with regard to physical hazard classes</b></li> <li>· <b>Explosives</b></li> <li>· <b>Flammable gases</b></li> <li>· <b>Aerosols</b></li> <li>· <b>Oxidising gases</b></li> <li>· <b>Gases under pressure</b></li> <li>· <b>Flammable liquids</b></li> <li>· <b>Flammable solids</b></li> <li>· <b>Self-reactive substances and mixtures</b></li> <li>· <b>Pyrophoric liquids</b></li> <li>· <b>Pyrophoric solids</b></li> <li>· <b>Self-heating substances and mixtures</b></li> <li>· <b>Substances and mixtures, which emit flammable gases in contact with water</b></li> </ul>	<p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p>

(Contd. on page 6)

## Safety data sheet

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

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Revision: 25.07.2024

**Trade name:** GRF PM PRO POWER WH CQ 425G\*12 L221

(Contd. of page 5)

· <b>Oxidising liquids</b>	Void
· <b>Oxidising solids</b>	Void
· <b>Organic peroxides</b>	Void
· <b>Corrosive to metals</b>	Void
· <b>Desensitised explosives</b>	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 (rat)
Inhalative	LC50/4 h	16.8 mg/l (rat)

##### 13463-67-7 titanium dioxide

Oral	LD50	>20000 mg/kg (rat)
Dermal	LD50	>10000 mg/kg (rabbit)
Inhalative	LC50/4 h	>6.82 mg/l (rat)

##### 2768-02-7 trimethoxyvinylsilane

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

#### · **Skin corrosion/irritation**

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

- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **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.

(Contd. on page 7)

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**Trade name:** GRF PM PRO POWER WH CQ 425G\*12 L221

(Contd. of page 6)

- **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 undiluted product or large quantities of it to reach ground water, water course or sewage system.

**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

(Contd. on page 8)

## Safety data sheet

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

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Version number 37 (replaces version 36)

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**Trade name:** GRF PM PRO POWER WH CQ 425G\*12 L221

(Contd. of page 7)

· <b>ADN</b>	not regulated
· <b>14.2 UN proper shipping name</b> · <b>ADR/ADN, ADN, IMDG, IATA</b>	not regulated
· <b>14.3 Transport hazard class(es)</b> · <b>ADR/ADN, ADN, IMDG, IATA</b> · <b>Class</b>	not regulated
· <b>14.4 Packing group</b> · <b>ADR/ADN, IMDG, IATA</b>	not regulated
· <b>14.5 Environmental hazards:</b> · <b>Marine pollutant:</b>	No
· <b>14.6 Special precautions for user</b>	Not applicable.
· <b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not applicable.
· <b>Transport/Additional information:</b>	Not dangerous according to the above specifications.
· <b>UN "Model Regulation":</b>	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.

· **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.

(Contd. on page 9)



## Safety data sheet

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

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Version number 37 (replaces version 36)

Revision: 25.07.2024

**Trade name:** GRF PM PRO POWER WH CQ 425G\*12 L221

(Contd. of page 8)

### 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.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H361f Suspected of damaging fertility.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.
- EUH212 Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

#### · **Classification according to Regulation (EC) No 1272/2008**

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

#### · **Department issuing SDS:** PSRA

#### · **Contact:** PSRA

#### · **Date of previous version:** 30.07.2021

#### · **Version number of previous version:** 36

#### · **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)

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

Acute Tox. 4: Acute toxicity – Category 4

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

Skin Sens. 1: Skin sensitisation – Category 1

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

Carc. 2: Carcinogenicity – Category 2

Repr. 2: Reproductive toxicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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