

## Safety data sheet

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

Printing date 19.03.2025

Version number 44 (replaces version 43)

Revision: 17.03.2025

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

- **1.1 Product identifier**
- **Trade name:** GRF MR EXTREME BD 20G\*6 L1
- **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.
- **Labelling of packages where the contents do not exceed 125 ml**
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **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

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**Dangerous components:**

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	≥3-<10%
CAS: 78-08-0 EINECS: 201-081-7 Reg.nr.: 01-2119967420-39-XXXX	Triethoxy(vinyl)silane Flam. Liq. 3, H226	2.5-10%
CAS: 2768-02-7 EINECS: 220-449-8 Index number: 014-049-00-0 Reg.nr.: 01-2119513215-52-XXXX	trimethoxyvinylsilane Flam. Liq. 3, H226; Acute Tox. 4, H332; Skin Sens. 1B, H317	≥0.1-<1%

**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).

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**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**

**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 <sup>3</sup>
	Consumer, inhalative, longterm exposition	1.7 mg/m <sup>3</sup>

**78-08-0 Triethoxy(vinyl)silane**

Oral	Consumer, oral, longterm exposition	5.036 mg/kg bw/day
Dermal	Worker, dermal, longterm exposition	10.26 mg/kg bw/day
	Consumer, dermal, longterm exposition	5.036 mg/kg bw/day
Inhalative	Worker, inhalative, longterm exposition	71.08 mg/m <sup>3</sup>
	Consumer, inhalative, longterm exposition	17.37 mg/m <sup>3</sup>

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

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· **PNECs**

**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

**78-08-0 Triethoxy(vinyl)silane**

Fresh water	0.56 mg/l
Fresh water sediment	0.44 mg/kg dry weight
Marine water	0.056 mg/l
Marine sediment	0.044 mg/kg dry weight
Soil	0.075 mg/kg
Sewage treatment plant	10 mg/l
Sporadic release	1.1 mg/l

**2768-02-7 trimethoxyvinylsilane**

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

· **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).

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· **Eye/face protection** Goggles recommended during refilling**SECTION 9: Physical and chemical properties**· **9.1 Information on basic physical and chemical properties**· **General Information**

· <b>Physical state</b>	Fluid
· <b>Colour:</b>	Clear
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.
· <b>Melting point/freezing point:</b>	Undetermined.
· <b>Boiling point or initial boiling point and boiling range</b>	194 °C
· <b>Flammability</b>	Not applicable.
· <b>Lower and upper explosion limit</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Flash point:</b>	102 °C
· <b>Auto-ignition temperature:</b>	400 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>pH</b>	Not determined.
· <b>Viscosity:</b>	
· <b>Kinematic viscosity</b>	Not determined.
· <b>Dynamic at 20 °C:</b>	10000 mPas
· <b>Solubility</b>	
· <b>water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density and/or relative density</b>	
· <b>Density at 20 °C:</b>	~1.11 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	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:** Fluid· **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:** 2.8 %· **Solids content:** 47.5 %

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- **Change in condition**
- **Evaporation rate** Not determined.
- **Information with regard to physical hazard classes**
- **Explosives** Void
- **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:**

**13822-56-5 3-(trimethoxysilyl)propylamine**

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

**78-08-0 Triethoxy(vinyl)silane**

Oral	LD50	>5000 mg/kg (rat)
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Dermal	LD50	>2000 mg/kg (rat)
<b>2768-02-7 trimethoxyvinylsilane</b>		
Oral	LD50	6899 mg/kg (rat)
Dermal	LD50	3158 mg/kg (rabbit)
Inhalative	LC50/4 h	16.8 mg/l (rat)

- **Primary irritant effect:**

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

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

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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.

**· Department issuing SDS:** PSRA**· Contact:** PSRA**· Date of previous version:** 30.07.2021**· Version number of previous version:** 43**· 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

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

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