Safety data sheet

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

Printing date 17.07.2026 Version number 29 (replaces version 28) Revision: 17.07.2026

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

· **1.1 Product identifier**

· **Trade name:** GRF PU FOAM AE 750ML*12 L001

· **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** Sealant

· **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**

Aerosol 1	H222 Extremely flammable aerosol.
	H229 Pressurised container: May burst if heated.
Acute Tox. 4	H332 Harmful if inhaled.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
Resp. Sens. 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1	H317 May cause an allergic skin reaction.
Carc. 2	H351 Suspected of causing cancer.
STOT SE 3	H335 May cause respiratory irritation.
STOT RE 2	H373 May cause damage to organs through prolonged or repeated exposure.

· **2.2 Label elements**

· **Classification needs to be in accordance with the NZ Hazardous Substances (Hazard Classification) Notice 2020**
The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS02 GHS07 GHS08

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· **Signal word** Danger

· **Hazard-determining components of labelling:**
Isocyanic acid, polymethylenepolyphenylene ester
· **Hazard statements**
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
· **Precautionary statements**
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P260 Do not breathe spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of contents/container in accordance with national regulations.
· **Additional information:**
EUH204 Contains isocyanates. May produce an allergic reaction.
As from 24 August 2023 adequate training is required before industrial or professional use.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable
· **vPvB:** Not applicable

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Sealant

· **Dangerous components:**

CAS: 9016-87-9 Polymer	Isocyanic acid, polymethylenepolyphenylene ester Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204 Specific concentration limits: Skin Irrit. 2; H315: C ≥ 5% Eye Irrit. 2; H319: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; H335: C ≥ 5 %	50-100%

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CAS: 13674-84-5 EINECS: 237-158-7 Reg.nr.: 01-2119447716-31	tris(2-chlorisopropyl)-phosphate Acute Tox. 4, H302	10-25%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 Reg.nr.: 01-2119485395-27	isobutane Flam. Gas 1A, H220; Press. Gas (Comp.), H280	2.5-10%
CAS: 115-10-6 EINECS: 204-065-8 Index number: 603-019-00-8 Reg.nr.: 01-2119472128-37	dimethyl ether Flam. Gas 1A, H220; Press. Gas (Comp.), H280	2.5-10%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21-XXXX	propane Flam. Gas 1A, H220; Press. Gas (Comp.), H280	2.5-10%

· **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:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **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:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **5.2 Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
· **5.3 Advice for firefighters**
· **Protective equipment:** Mouth respiratory protective device.

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SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections**
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** Ensure good ventilation/exhaustion at the workplace.
· **Information about fire - and explosion protection:**
Do not spray onto a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Keep respiratory protective device available.
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Observe official regulations on storing packagings with pressurised containers.
· **Information about storage in one common storage facility:** Not required
· **Further information about storage conditions:** Keep container tightly sealed.
· **Storage class:** 2 B
· **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:**	
9016-87-9 Isocyanic acid, polymethylenepolyphenylene ester	
OEL (Ireland)	Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³ as -NCO; Sens.
BOELV (EU)	Short-term value: 0.012 (0.020)* mg/m³ Long-term value: 0.006 (0.010)* mg/m³ as -NCO *until 31.12.2028
75-28-5 isobutane	
OEL (Ireland)	Short-term value: 1000 ppm

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115-10-6 dimethyl ether	
OEL (Ireland)	Long-term value: 1920 mg/m³, 1000 ppm IOELV
IOELV (EU)	Long-term value: 1920 mg/m³, 1000 ppm
74-98-6 propane	
OEL (Ireland)	Asphx

· **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.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
· **Respiratory protection:** Not required
· **Hand protection**



Protective gloves

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**
Safety glasses



Tightly sealed goggles

· **Body protection:** Use protective suit.

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SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Physical state**	Aerosol
· **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**	-44.5 °C
· **Flammability**	Not applicable
· **Lower and upper explosion limit**	
· **Lower:**	1.8 Vol %
· **Upper:**	8.5 Vol %
· **Flash point:**	-97 °C
· **Auto-ignition temperature:**	235 °C
· **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 at 20 °C:**	<0.1 hPa
· **Density and/or relative density**	
· **Density at 20 °C:**	1.121 g/cm³
· **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:**	Aerosol
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· **Solvent content:**	
· **Organic solvents:**	12.5 %
· **Solids content:**	56.0 %
· **Change in condition**	
· **Evaporation rate**	Not applicable.

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· **Information with regard to physical hazard classes**	
· **Explosives**	Void
· **Flammable gases**	Void
· **Aerosols**	Extremely flammable aerosol. Pressurised container: May burst if heated.
· **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**
Reacts with alcohols.
Reacts with water.
Reacts with alkali, amines and strong acids.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** Danger of forming toxic pyrolysis products.

*

SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· **Acute toxicity** Harmful if inhaled.

· **LD/LC50 values relevant for classification:**		
9016-87-9 Isocyanic acid, polymethylenepolyphenylene ester		
Oral	LD50	7500 mg/kg (rat)
Dermal	LD50	>9400 mg/kg (rabbit)
Inhalative	LC50/4 h	0.493 mg/l (rat)

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13674-84-5 tris(2-chlorisopropyl)-phosphate		
Oral	LD50	3600 mg/kg (rat)
115-10-6 dimethyl ether		
Inhalative	LC50/4 h	308 mg/l (rat)

· **Primary irritant effect:**
· **Skin corrosion/irritation**
Causes skin irritation.
· **Serious eye damage/irritation**
Causes serious eye irritation.
· **Respiratory or skin sensitisation**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
· **Germ cell mutagenicity**
Not applicable
Based on available data, the classification criteria are not met.
· **Carcinogenicity** Suspected of causing cancer.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** May cause respiratory irritation.
· **STOT-repeated exposure** May cause damage to organs through prolonged or repeated exposure.
· **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**	UN1950
· **14.2 UN proper shipping name**	
· **ADR/ADN**	1950 AEROSOLS
· **IMDG**	AEROSOLS
· **IATA**	AEROSOLS, flammable
· **14.3 Transport hazard class(es)**	
· **ADR/ADN**	



· **Class**	2 5F Gases.
· **Label**	2.1
· **IMDG, IATA**	



· **Class**	2 Gases.
· **Label**	2.1
· **14.4 Packing group**	
· **ADR/ADN, IMDG, IATA**	not regulated
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Warning: Gases.
· **Hazard identification number (Kemler code):**	-
· **EMS Number:**	F-D,S-U
· **Stowage Code**	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a

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·	capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· **Segregation Code**	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable
· **Transport/Additional information:**	
· **Quantity limitations**	On passenger aircraft/rail: 75 kg On cargo aircraft only: 150 kg
· **ADR/ADN**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E0 Not permitted as Excepted Quantity
· **Transport category**	2
· **Tunnel restriction code**	D
· **IMDG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E0 Not permitted as Excepted Quantity
· **UN "Model Regulation":**	UN 1950 AEROSOLS, 2.1

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.
· **Seveso category** P3a FLAMMABLE AEROSOLS
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 150 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **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.

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· **REGULATION (EU) 2019/1148**

· **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**
H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
EUH204 Contains isocyanates. May produce an allergic reaction.

· **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.

Aerosols, Section 2.3.1	Bridging principles
Acute toxicity - inhalation Skin corrosion/irritation Serious eye damage/irritation Respiratory sensitisation Skin sensitisation Carcinogenicity Specific target organ toxicity (single exposure) Specific target organ toxicity (repeated exposure)	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:** 23.01.2022
· **Version number of previous version:** 28
· **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

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ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Gas 1A: Flammable gases – Category 1A
Aerosol 1: Aerosols – Category 1
: Aerosols – Category 3
Press. Gas (Comp.): Gases under pressure – Compressed gas
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
· *** Data compared to the previous version altered.**

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