

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 17.06.2021

Version number 25

Revision: 17.06.2021

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

- **1.1 Product identifier**
- **Trade name:** GRF SILICON SPRAY AE 300ML*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** Lubricant
- **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:** Bison QESH
- **1.4 Emergency telephone number:** +31 88 3235700. Operating hours mo-fr 08:00h-17:00h (CET)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

GB-EN

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 17.06.2021

Version number 25

Revision: 17.06.2021

Trade name: GRF SILICON SPRAY AE 300ML*12 L221

(Contd. of page 1)

· **Hazard pictograms**



GHS02 GHS07 GHS09

· **Signal word** Danger

· **Hazard-determining components of labelling:**

Naphtha (petroleum), hydrotreated heavy pentane
Hydrocarbons, C6, isoalkanes, <5% n-hexane
Naphtha (petroleum), hydrotreated light

· **Hazard statements**

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

· **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.
P261 Avoid breathing spray.
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.

· **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:** Lubricant

· **Dangerous components:**

CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0	n-Butan ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	25-50%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21	propane ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	10-25%
CAS: 64742-48-9 EC number: 927-241-2 Index number: 649-328-00-1 Reg.nr.: 01-2119471843-32	Naphtha (petroleum), hydrotreated heavy ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ STOT SE 3, H336; Aquatic Chronic 3, H412	10-25%

(Contd. on page 3)

GB-EN

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 17.06.2021

Version number 25

Revision: 17.06.2021

Trade name: GRF SILICON SPRAY AE 300ML*12 L221

(Contd. of page 2)

CAS: 109-66-0 EINECS: 203-692-4 Index number: 601-006-00-1	pentane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H336	2.5-10%
CAS: 64742-49-0 EC number: 931-254-9 Index number: 649-328-00-1 Reg.nr.: 01-2119484651-34	Hydrocarbons, C6, isoalkanes, <5% n-hexane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	2.5-10%
CAS: 64742-49-0 EC number: 926-605-8 Index number: 649-328-00-1 Reg.nr.: 01-2119486291-36	Naphtha (petroleum), hydrotreated light ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	2.5-10%
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: 110-54-3 EINECS: 203-777-6 Index number: 601-037-00-0	n-hexane ⚠ Flam. Liq. 2, H225; ⚠ Repr. 2, H361f; STOT RE 2, H373; Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	<1%
CAS: 110-82-7 EINECS: 203-806-2 Index number: 601-017-00-1 Reg.nr.: 01-2119463273-41	cyclohexane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	<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:**

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.

· **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**

No further relevant information available.

(Contd. on page 4)

GB-EN

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 17.06.2021

Version number 25

Revision: 17.06.2021

Trade name: GRF SILICON SPRAY AE 300ML*12 L221

(Contd. of page 3)

- **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**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
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 item 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.
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**
- **Additional information about design of technical facilities:** No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:**106-97-8 n-Butan**

WEL	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
-----	---

109-66-0 pentane

WEL	Long-term value: 1800 mg/m ³ , 600 ppm
-----	---

(Contd. on page 5)

GB-EN

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 17.06.2021

Version number 25

Revision: 17.06.2021

Trade name: GRF SILICON SPRAY AE 300ML*12 L221

(Contd. of page 4)

110-54-3 n-hexane

WEL Long-term value: 72 mg/m³, 20 ppm

110-82-7 cyclohexane

WEL Short-term value: 1050 mg/m³, 300 ppm

Long-term value: 350 mg/m³, 100 ppm

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

· **8.2 Exposure controls**

· **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.

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation.

· **Recommended filter device for short term use:** Filter AX

· **Protection of hands:**



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 protection:** Not required.

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

SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form:

Aerosol

Colour:

According to product specification

· **Odour:**

Characteristic

· **Odour threshold:**

Not determined.

(Contd. on page 6)

GB-EN

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 17.06.2021

Version number 25

Revision: 17.06.2021

Trade name: GRF SILICON SPRAY AE 300ML*12 L221

(Contd. of page 5)

· pH-value:	Not determined.
· Change in condition Melting point/freezing point: Initial boiling point and boiling range:	Undetermined. 36.1 °C
· Flash point:	-97 °C
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	240 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits: Lower: Upper:	0.6 Vol % 10.9 Vol %
· Vapour pressure at 20 °C:	8300 hPa
· Density at 20 °C: · Relative density · Vapour density · Evaporation rate	0.635 g/cm ³ Not determined. Not determined. Not applicable.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: Dynamic: Kinematic:	Not determined. Not determined.
· Solvent content: Organic solvents:	74.4 %
Solids content:	0.0 %
· 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.

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.

(Contd. on page 7)

GB-EN

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 17.06.2021

Version number 25

Revision: 17.06.2021

Trade name: GRF SILICON SPRAY AE 300ML*12 L221

(Contd. of page 6)

- **10.6 Hazardous decomposition products:** Danger of forming toxic pyrolysis products.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

106-97-8 n-Butan

Inhalative LC50/4 h 658 mg/l (rat)

64742-48-9 Naphtha (petroleum), hydrotreated heavy

Oral LD50 >5000 mg/kg (rat)

Dermal LD50 >3000 mg/kg (rab)

110-82-7 cyclohexane

Oral LD50 12705 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **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.
- **Additional toxicological information:**
- **Acute effects (acute toxicity, irritation and corrosivity)** Not applicable.
- **Sensitisation** Not applicable.
- **Repeated dose toxicity** Not applicable.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Not applicable.
- **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**
May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard**
May be fatal if swallowed and enters airways.

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.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
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.

(Contd. on page 8)

GB-EN

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 17.06.2021

Version number 25

Revision: 17.06.2021

Trade name: GRF SILICON SPRAY AE 300ML*12 L221





(Contd. of page 7)

- Also poisonous for fish and plankton in water bodies.
- Toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

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**
- **ADR/ADN, IMDG, IATA** UN1950
- **14.2 UN proper shipping name**
- **ADR/ADN** 1950 AEROSOLS
- **IMDG** AEROSOLS (PENTANES, Hydrocarbons, C6, isoalkanes, <5% n-hexane), MARINE POLLUTANT
- **IATA** AEROSOLS, flammable
- **14.3 Transport hazard class(es)**
- **ADR/ADN**
- 

- **Class** 2 5F Gases.
- **Label** 2.1
- **IMDG**
- 

- **Class** 2.1

(Contd. on page 9)

GB-EN

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 17.06.2021

Version number 25

Revision: 17.06.2021

Trade name: GRF SILICON SPRAY AE 300ML*12 L221

(Contd. of page 8)

· **Label** 2.1

· **IATA**



· **Class** 2.1
· **Label** 2.1

· **14.4 Packing group**
· **ADR/ADN, IMDG, IATA** not regulated

· **14.5 Environmental hazards:** Product contains environmentally hazardous substances: Naphtha (petroleum), hydrotreated light
· **Marine pollutant:** No
· **Special marking (ADR/ADN):** Symbol (fish and tree)

· **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 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 Transport in bulk according to Annex II of Marpol and the IBC Code** 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

(Contd. on page 10)

GB-EN

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 17.06.2021

Version number 25

Revision: 17.06.2021

Trade name: GRF SILICON SPRAY AE 300ML*12 L221

(Contd. of page 9)

- **IMDG**
- **Limited quantities (LQ)** 1L
- **Excepted quantities (EQ)** Code: E0
Not permitted as Excepted Quantity
- **Remarks:** Under certain conditions substances in Class 3 (flammable liquids) can be classified in packinggroup III.
See IMDG, Part 2, Chapter 2.3, Paragraph 2.3.2.2
- **UN "Model Regulation":** UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS

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
E2 Hazardous to the Aquatic Environment
- **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, 57
- **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.
- **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.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H361f Suspected of damaging fertility.
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.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

(Contd. on page 11)

GB-EN

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 17.06.2021

Version number 25

Revision: 17.06.2021

Trade name: GRF SILICON SPRAY AE 300ML*12 L221

(Contd. of page 10)

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

Aerosols	Bridging principles
Skin corrosion/irritation Specific target organ toxicity (single exposure) Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.
Aspiration hazard	Expert judgement

· Department issuing SDS: Bison QESH**· Contact:** Reach coordinator**· 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)

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

Press. Gas (Comp.): Gases under pressure – Compressed gas

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

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

Repr. 2: Reproductive toxicity – Category 2

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

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

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

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

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

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· * Data compared to the previous version altered.

GB-EN