

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 07.01.2009

Revision: 07.01.2009

1 Identification of the substance/preparation and of the company/undertaking

- . **Product details**
- . **Trade name:** Friatherm Component+
- . **Application of the substance / the preparation** Adhesive
- . **Manufacturer/Supplier:**
Bison International
Dr.A.F.Philipsstraat 9
NL-4462 EW Goes
PO Box 160
NL-4460 AD Goes
tel. +31 113 235700
fax. +31 113 232077
e mail: msds@bison.boltongroup.nl
- . **Further information obtainable from:** R & D Department
- . **Information in case of emergency:** +31 113 235700

2 Hazards identification

- . **Hazard description:**



Xi Irritant
F Highly flammable

- . **Information concerning to particular hazards to man and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

Has a narcotizing effect.

R 11 Highly flammable.

R 36/37 Irritating to eyes and respiratory system.

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.

- . **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

3 Composition/information on ingredients

- . **Chemical characterization**

- . **Description:** Adhesive

- . **Dangerous components:**

CAS: 109-99-9 tetrahydrofuran 50-100%

EINECS: 203-726-8 Xi, F; R 11-19-36/37

CAS: 78-93-3 methyl ethyl ketone 10-25%

EINECS: 201-159-0 Xi, F; R 11-36-66-67

- . **Additional information:**

For the wording of the listed risk phrases refer to section 16.

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4 First-aid measures**. After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stable in side position for transportation.

. After skin contact: Generally the product does not irritate the skin.**. After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

. After swallowing: Do not induce vomiting; call for medical help immediately.**5 Fire-fighting measures****. Suitable extinguishing agents:**

Water haze

Alcohol resistant foam

Fire-extinguishing powder

Carbon dioxide

. For safety reasons unsuitable extinguishing agents: Water with full jet**. Protective equipment:** Mount respiratory protective device.**. Additional information**

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures**. Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

. Measures for environmental protection:

Prevent seepage into sewage system, workpits and cellars.

Do not allow to enter sewers/ surface or ground water.

. Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

7 Handling and storage**. Handling:****. Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

. Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

. Storage:**. Requirements to be met by storerooms and receptacles:** Store in a cool location.**. Information about storage in one common storage facility:** Not required.**. Further information about storage conditions:**

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

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8 Exposure controls/personal protection**. Additional information about design of technical facilities:**

No further data; see item 7.

. Ingredients with limit values that require monitoring at the workplace:**109-99-9 tetrahydrofuran**WEL Short-term value: 300 mg/m³, 100 ppmLong-term value: 150 mg/m³, 50 ppm

Sk

78-93-3 methyl ethyl ketoneWEL Short-term value: 899 mg/m³, 300 ppmLong-term value: 600 mg/m³, 200 ppm

Sk

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

Avoid contact with the eyes and skin.

. Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Suitable respiratory protective device recommended.

. Protection of hands:

Protective gloves

Solvent resistant gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

. Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

. Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

. For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

PVC or PE gloves

. Eye protection: Tightly sealed goggles**. Body protection:** Solvent resistant protective clothing**9 Physical and chemical properties****. General Information****Form:** Fluid**Colour:** According to product specification**Odour:** Characteristic

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- . **Change in condition**
 - Melting point/Melting range:** Undetermined.
 - Boiling point/Boiling range:** 55°C
- . **Flash point:** < 0°C
- . **Ignition temperature:** 230°C
- . **Self-igniting:** Product is not selfigniting.
- . **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- . **Explosion limits:**
 - Lower:** 1.5 Vol %
 - Upper:** 12.0 Vol %
- . **Vapour pressure at 20°C:** 200 hPa
- . **Density at 20°C:** 1 g/cm³
- . **Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- . **Viscosity:**
 - Dynamic at 20°C:** 5000 mPas
- . **Solids content:** 20.7 %

10 Stability and reactivity

- . **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- . **Dangerous reactions** No dangerous reactions known.
- . **Dangerous decomposition products:** Danger of forming toxic pyrolysis products.

11 Toxicological information

- . **Acute toxicity:**
- . **Primary irritant effect:**
 - . **on the skin:** No irritant effect.
 - . **on the eye:** Irritating effect.
- . **Sensitization:** No sensitizing effects known.
- . **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

12 Ecological information

- . **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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13 Disposal considerations

- . **Product:**
- . **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- . **Uncleaned packaging:**
- . **Recommendation:**
Disposal must be made according to official regulations.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

14 Transport information

- . **Land transport ADR/RID (cross-border)**
- . **ADR/RID class:** 3 (F1) Flammable liquids.
- . **Danger code (Kemler):** 33
- . **UN-Number:** 1133
- . **Packaging group:** III
- . **Hazard label** 3
- . **Description of goods:** 1133 ADHESIVES, special provision 640H
- . **Limited quantities (LQ)** LQ7
- . **Transport category** 3
- . **Tunnel restriction code** D/E
- . **Maritime transport IMDG:**
- . **IMDG Class:** 3
- . **UN Number:** 1133
- . **Label** 3
- . **Packaging group:** III
- . **EMS Number:** F-E,S-D
- . **Marine pollutant:** No
- . **Proper shipping name:** ADHESIVES
- . **Air transport ICAO-TI and IATA-DGR:**
- . **ICAO/IATA Class:** 3
- . **UN/ID Number:** 1133
- . **Label** 3
- . **Packaging group:** III
- . **Proper shipping name:** ADHESIVES

15 Regulatory information

- . **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- . **Code letter and hazard designation of product:**



Xi Irritant
F Highly flammable

- . **Risk phrases:**
- 11 Highly flammable.
- 36/37 Irritating to eyes and respiratory system.
- 66 Repeated exposure may cause skin dryness or cracking.

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67 Vapours may cause drowsiness and dizziness.

. Safety phrases:

9 Keep container in a well-ventilated place.

16 Keep away from sources of ignition - No smoking.

24/25 Avoid contact with skin and eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

46 If swallowed, seek medical advice immediately and show this container or label.

51 Use only in well-ventilated areas.

. National regulations:**. Technical instructions (air):****. Class Share in %****. NK 50-100****. Waterhazard class:**

Water hazard class 1 (Self-assessment): slightly hazardous for water.

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 R-phrases

11 Highly flammable.

19 May form explosive peroxides.

36 Irritating to eyes.

36/37 Irritating to eyes and respiratory system.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

. Department issuing MSDS: R & D laboratory**. Contact: M.L. de Jager****. * Data compared to the previous version altered.**

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