

# Material Safety Data Sheet

According to 91/155 EEC

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## • \* 1 Identification of the substance/preparation and of the

### company/undertaking

- **Product details**
- **Trade name:** Griffon Uni 100
- **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 248248  
fax. +31 113 232077
- **Further information obtainable from:** R & D Department
- **Information in case of emergency:** +31 113 235700

## • 2 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Adhesive

### Dangerous components:

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109-99-9 tetrahydrofuran	50-100 %
Xi, F; R 11-19-36/37 EINECS: 203-726-8	
108-94-1 cyclohexanone	10-25 %
Xn; R 10-20	

EINECS: 203-631-1  
78-93-3 methyl ethyl ketone 2.5-10 %

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

- **Additional information:**

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

- **3 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.

R 11 Highly flammable.

R 36/37 Irritating to eyes and respiratory system.

- **Classification system:**

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

- **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.

- \* **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/m<sup>3</sup>, 100 ppm

Long-term value: 150 mg/m<sup>3</sup>, 50 ppm

108-94-1 cyclohexanone

WEL: Short-term value: 20 ppm

Long-term value: 10 ppm

78-93-3 methyl ethyl ketone

WEL: Short-term value: 899 mg/m<sup>3</sup>, 300 ppm

Long-term value: 600 mg/m<sup>3</sup>, 200 ppm

- **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:**

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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Value/Range Unit

Method

- **Change in condition**

- **Melting point/Melting range:** Undetermined.

- **Boiling point/Boiling range:** 65 ° C

- **Flash point:** < 0 ° C

- **Ignition temperature:** 230.0 ° 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:** 1.3 Vol %
- **Upper:** 12.0 Vol %
- **Vapour pressure:** at 20 ° C 200.0 hPa
- **Density:** at 20 ° C 0.99 g/cm<sup>3</sup>
- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- **Viscosity:**
- **Dynamic:** at 20 ° C 9000 mPas
- **Solids content:** 20.9 %

- **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.

• **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

• **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

- **Remarks:**

Not submit to ADR/VLG in small packing in original outside packing with UN number placed inside diamond shaped label (Limited quantity)

- **\*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.

- **Safety phrases:**

2 Keep out of the reach of children.  
9 Keep container in a well-ventilated place.  
16 Keep away from sources of ignition – No smoking.  
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).  
46 If swallowed, seek medical advice immediately and show this container or label.  
56 Dispose of this material and its container to hazardous or special waste collection point.

- **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**

10 Flammable.

11 Highly flammable.

19 May form explosive peroxides.

20 Harmful by inhalation.

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.**