Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.04.2014 Version number 11 Revision: 09.04.2014

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

- . 1.1 Product identifier
- . Trade name: GIRPI RERFIXB BOT 1L*8 FREN
- 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: msds@bison.boltongroup.nl

- . Further information obtainable from: Bison QESH
- · 1.4 Emergency telephone number: +31 88 3235700

2 Hazards identification

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



GHS02

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08

Carc. 2 H351 Suspected of causing cancer.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

. Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

R40: Limited evidence of a carcinogenic effect.

Xi; Irritant

R36/37: Irritating to eyes and respiratory system.

F; Highly flammable

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R11: Highly flammable.

R66-67: Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

. Information concerning particular hazards for human 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.

Classification system:

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

- . 2.2 Label elements
- . 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:

Xn Harmful

F Highly flammable

. Hazard-determining components of labelling:

tetrahydrofuran

- . Risk phrases:
 - 11 Highly flammable.
 - 36/37 Irritating to eyes and respiratory system.
 - 40 Limited evidence of a carcinogenic effect.
 - 66 Repeated exposure may cause skin dryness or cracking.
 - 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.
 - 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.
- . 2.3 Other hazards
- . Results of PBT and vPvB assessment
- . PBT: Not applicable.
- . vPvB: Not applicable.

3 Composition/information on ingredients

- . 3.2 Mixtures
- . Description: Adhesive
- . Dangerous components:

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CAS: 109-99-9

EINECS: 203-726-8

tetrahydrofuran

50-100%

🗙 Xn R40; 🗙 Xi R36/37; 🙀 F R11

Reg.nr.: 01-2119444314-46 R19

Carc. Cat. 3

♠ Flam. Liq. 2, H225; ♦ Carc. 2, H351; ↑ Eye Irrit. 2, H319; STOT SE 3, H335

methyl ethyl ketone

CAS: 78-93-3

EINECS: 201-159-0

Reg.nr.: 01-2119457290-43 R66-67

🗙 Xi R36; 🥻 F R11

10-25%

♠ Flam. Liq. 2, H225; ♠ Eye Irrit. 2, H319; STOT SE 3, H336

. Additional information:

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

4 First aid measures

- . 4.1 Description of 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.
- . 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.

5 Firefighting measures

- . 5.1 Extinguishing media
- . Suitable extinguishing agents:

Water haze

Alcohol resistant foam

Fire-extinguishing powder

Carbon dioxide

- . For safety reasons unsuitable extinguishing agents: Water with full jet
- . 5.2 Special hazards arising from the substance or mixture $% \left(1\right) =\left(1\right) \left(1\right)$

No further relevant information available.

- . 5.3 Advice for firefighters
- . 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

. 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

. 6.2 Environmental precautions:

Prevent seepage into sewage system, workpits and cellars.

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

. 6.3 Methods and material for containment and cleaning up:

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

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.

7 Handling and storage

. 7.1 Precautions 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.

- . 7.2 Conditions for safe storage, including any incompatibilities
- 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.

. 7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

. Additional information about design of technical facilities:

No further data; see item 7.

- . 8.1 Control parameters
- . Ingredients with limit values that require monitoring at the workplace:

109-99-9 tetrahydrofuran

WEL () Short-term value: 300 mg/m³, 100 ppm Long-term value: 150 mg/m³, 50 ppm Sk

78-93-3 methyl ethyl ketone

WEL () Short-term value: 899 mg/m³, 300 ppm
 Long-term value: 600 mg/m³, 200 ppm
 Sk, BMGV

- . 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.

Avoid contact with the eyes and skin.

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. 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 trough 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

- . 9.1 Information on basic physical and chemical properties
- . General Information

. Appearance:

Form: Fluid

Colour: According to product specification

. Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 65 °C

. Flash point: < 0 °C

. Flammability (solid, gaseous): Not applicable.

. Ignition temperature: 230 °C

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. Decomposition temperature: Not determined.

. 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 % 12.0 Vol % 12.0 Vol % 200 hPa

Density at 20 °C: 0.96 g/cm³
 Relative density Not determined.
 Vapour density Not determined.
 Evaporation rate Not determined.

. Solubility in / Miscibility with

water: Not miscible or difficult to mix.

. Partition coefficient (n-octanol/

water): Not determined.

. Viscosity:

Dynamic at 20 °C: 2500 mPas

Kinematic:
Not determined.

Solids content: 20.8 %

. 9.2 Other information No further relevant information available.

10 Stability and reactivity

. 10.1 Reactivity

. 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:

Danger of forming toxic pyrolysis products.

11 Toxicological information

- . 11.1 Information on toxicological effects
- . Acute toxicity:
- . LD/LC50 values relevant for classification:

109-99-9 tetrahydrofuran

Oral LD50 3000 mg/kg (rat)

- . 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:

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Irritant

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.
- . Additional ecological information:
- . General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

- . 12.5 Results of PBT and vPvB assessment
- . PBT: Not applicable.
- . vPvB: Not applicable.
- . 12.6 Other adverse effects No further relevant information available.

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.

- . 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

- . 14.1 UN-Number
- . ADR, IMDG, IATA

UN1133

- . 14.2 UN proper shipping name
- . ADR

1133 ADHESIVES, special provision 640H

ADHESIVES

- IMDG, IATA14.3 Transport hazard class(es)
- . ADR



. Class

3 (F1) Flammable liquids.

. Label

3

IMDG, IATA



. Class

3 Flammable liquids.

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. Label

. 14.4 Packing group

. ADR, IMDG, IATA

III

3

. 14.5 Environmental hazards:

. Marine pollutant: No

. 14.6 Special precautions for user Warning: Flammable liquids.

. Danger code (Kemler):

. EMS Number: F-E,S-D

. 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC

Code Not applicable.

. Transport/Additional information:

. Limited quantities (LQ) 5L . Transport category . Tunnel restriction code D/E

. IMDG

. 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": UN1133, ADHESIVES, special provision 640H, 3,

III

15 Regulatory information

- . 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- . 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:

Xn Harmful

F Highly flammable

. Hazard-determining components of labelling:

tetrahydrofuran

. Risk phrases:

Highly flammable.

36/37 Irritating to eyes and respiratory system.

Limited evidence of a carcinogenic effect. 40

66 Repeated exposure may cause skin dryness or cracking.

Vapours may cause drowsiness and dizziness.

. Safety phrases:

Keep container in a well-ventilated place.

Keep away from sources of ignition - No smoking. 16

24/25 Avoid contact with skin and eyes.

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.

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- 51 Use only in well-ventilated areas.
- . 15.2 Chemical safety assessment:
 - A Chemical Safety Assessment has not been carried out.

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

- H225 Highly flammable liquid and vapour.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H351 Suspected of causing cancer.
- R11 Highly flammable.
- R19 May form explosive peroxides.
- R36 Irritating to eyes.
- R36/37 Irritating to eyes and respiratory system.
- R40 Limited evidence of a carcinogenic effect.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.
- . Department issuing MSDS: QESH Department
- . Contact: Reach coördinator
- . Abbreviations and acronyms:

Flam. Liq. 2: Flammable liquids, Hazard Category 2
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Carc. 2: Carcinogenicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

* Data compared to the previous version altered.