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

1.1 Product identifier

Trade name: Griffon HCR 36

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 Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

R40: Limited evidence of a carcinogenic effect.

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.

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

Hazard-determining components of labelling:
dichloromethane

Risk phrases:
40 Limited evidence of a carcinogenic effect.

Safety phrases:
23 Do not breathe vapour.
24/25 Avoid contact with skin and eyes.
Trade name: GRIFFON HCR-36 TIN DRUKDEKSEL 1L*2 L292

(Contd. of page 1)

39/37 Wear suitable protective clothing and gloves.
46 If swallowed, seek medical advice immediately and show this container or label.
51 Use only in well-ventilated areas.
60 This material and its container must be disposed of as hazardous waste.

Special labelling of certain preparations:
- Contains methyltinmercaptide. May produce an allergic reaction.

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:
  - CAS: 75-09-2 dichloromethane 50-100%
  - EINECS: 200-838-9 Xn R40
  - Reg.nr.: 01-2119480404-41 Carc. Cat. 3
  - CAS: 57583-35-4 methyltinmercaptide ≤ 2.5%
  - Reg.nr.: 01-2119492591-32 T R48/25; Xn R22-63; Xi R43 R52/53

- 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; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- Most important symptoms and effects, both acute and delayed
  - No further relevant information available.
- 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:
  - CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture
  - No further relevant information available.
- Advice for firefighters
  - Protective equipment: No special measures required.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
- Not required.
- Environmental precautions:
  - 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/exhaustation at the workplace.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.

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:
75-09-2 dichloromethane
WEL () Short-term value: 1060 mg/m³, 300 ppm
Long-term value: 350 mg/m³, 100 ppm
BMGV, Sk

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.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
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.
Protection of hands:

Protective 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.

Eye protection: Safety glasses

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance: Fluid

Form: Fluid

Colour: According to product specification

Odour: Characteristic

Odour threshold: Not determined.

pH-value: Not determined.

Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 40 °C

Flash point: Not applicable.

Flammability (solid, gaseous): Not applicable.

Ignition temperature: 605 °C

Decomposition temperature: Not determined.

Self-igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: 13.0 Vol %

Upper: 22.0 Vol %

Vapour pressure at 20 °C: 453 hPa

Density at 20 °C: 1.34 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: 300 mPas

Kinematic: Not determined.

Solids content: 11.0 %

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:
No dangerous decomposition products known.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:
LD/LC50 values relevant for classification:
75-09-2 dichloromethane
Oral LD50 2136 mg/kg (rat)
Inhalative LC50/4 h 88 mg/l (rat)

Primary irritant effect:
on the skin: No irritant effect.
on the eye: No 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:

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:
Danger to drinking water if even small quantities leak into the ground.
Water hazard class 2 (German Regulation) (Self-assessment): 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 UN1593

14.2 UN proper shipping name
- ADR 1593 DICHLOROMETHANE
- IMDG, IATA DICHLOROMETHANE

14.3 Transport hazard class(es)
- ADR
  - Class 6.1 (T1) Toxic substances.
  - Label 6.1

- IMDG, IATA
  - Class 6.1 Toxic substances.
  - Label 6.1

14.4 Packing group
- ADR, IMDG, IATA III

14.5 Environmental hazards:
- Marine pollutant: No

14.6 Special precautions for user
- Warning: Toxic substances.
- Danger code (Kemler): 60
- EMS Number: F-A,S-A

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
- Not applicable.

Transport/Additional information:

14.8 Transport category
- 2

14.9 Tunnel restriction code
- E

14.10 Limitations with respect to quantities
- ADR
  - Limited quantities (LQ) 5L
  - Excepted quantities (EQ) Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml

- IMDG
  - Limited quantities (LQ) 5L
  - Excepted quantities (EQ) Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: (Contd. on page 7)
Trade name: Griffon HCR-36 TIN DRUKDEKSEL 1L*2 L292

Remarks: 1000 ml
Under certain conditions substances in Class 3 (flammable liquids) can be classified in packing group III. See IMDG, Part 2, Chapter 2.3, Paragraph 2.3.2.2

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

Hazard-determining components of labelling:
dichloromethane

Risk phrases:
40 Limited evidence of a carcinogenic effect.

Safety phrases:
23 Do not breathe vapour.
24/25 Avoid contact with skin and eyes.
36/37 Wear suitable protective clothing and gloves.
46 If swallowed, seek medical advice immediately and show this container or label.
51 Use only in well-ventilated areas.
60 This material and its container must be disposed of as hazardous waste.

Special labelling of certain preparations:
Contains methyltinmercaptide. May produce an allergic reaction.

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
R22 Harmful if swallowed.
R40 Limited evidence of a carcinogenic effect.
R43 May cause sensitisation by skin contact.
R48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63 Possible risk of harm to the unborn child.

Department issuing MSDS: QESH Department
Contact: Reach coördinator

* Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking
   1.1 Product identifier
   Trade name: GRIFFON HCR-36 TIN DRUKDEKSEL 1L*2 L292
   1.2 Relevant identified uses of the substance or mixture and uses advised against
      No further relevant information available.
   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
      Carc. 2 H351 Suspected of causing cancer.
   2.2 Label elements
      Labelling according to Regulation (EC) No 1272/2008
      The product is classified and labelled according to the CLP regulation.
      Hazard pictograms
      GHS08
      Signal word Warning
      Hazard-determining components of labelling:
      dichloromethane
      Hazard statements
      H351 Suspected of causing cancer.
      Precautionary statements
      P280 Wear protective gloves/protective clothing/eye protection/face protection.
      P201 Obtain special instructions before use.
      P202 Do not handle until all safety precautions have been read and understood.
      P308+P313 IF exposed or concerned: Get medical advice/attention.
      P501 Dispose of contents/container in accordance with national regulations.
      Additional information:
      Contains methyltinmercaptide. May produce an allergic reaction.
39.0.2.3 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:

- CAS: 75-09-2 dichloromethane 50-100%
- EINECS: 200-838-9 Carc. 2, H351
- Reg.nr.: 01-2119480404-41
- CAS: 57583-35-4 methyltinmercaptide ≤ 2,5%
- EINECS: 298-228-6 Repr. 2, H361; Acute
- Reg.nr.: 01-2119492591-32 Tox. 4, H302; Skin Sens. 1, H317; Aquatic
- Reg.nr.: 01-2119492099-7 Chronic 3, H412

4 First aid measures

4.1 Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.

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

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.

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.

5.3 Advice for firefighters

Protective equipment: No special measures required.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Not required.

6.2 Environmental precautions:

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.
7 Handling and storage

- **7.1 Precautions for safe handling**
  - Ensure good ventilation/exhaustion at the workplace.

- **7.2 Conditions for safe storage, including any incompatibilities**
  - **Storage:**
    - Requirements to be met by storerooms and receptacles: No special requirements.
    - Information about storage in one common storage facility: Not required.
    - Further information about storage conditions: None.

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

8 Exposure controls/personal protection

- **8.1 Control parameters**
  - Ingredients with limit values that require monitoring at the workplace:
    - 75-09-2 dichloromethane
      - WEL (Great Britain) Short-term value: 1060 mg/m³, 300 ppm
      - Long-term value: 350 mg/m³, 100 ppm
      - BMGV, Sk

- **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.
      - Wash hands before breaks and at the end of work.
      - Do not inhale gases / fumes / aerosols.
    - **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.
    - **Protection of hands:**
      - **Protective 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.
9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance: Fluid
Colour: According to product specification
Odour: Characteristic
Odour threshold: Not determined.

pH-value: Not determined.

Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 40 °C

Flash point: Not applicable.
Flammability (solid, gaseous): Not applicable.
Ignition temperature: 605 °C
Decomposition temperature: Not determined.
Self-igniting: Product is not selfigniting.
Danger of explosion: Product does not present an explosion hazard.

Explosion limits:
Lower: 13,0 Vol %
Upper: 22,0 Vol %

Vapour pressure at 20 °C: 453 hPa
Density at 20 °C: 1,34 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: 300 mPas
Kinematic: Not determined.
Solids content: 11,0 %

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.

(Contd. on page 5)
39.10.3 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:

No dangerous decomposition products known.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:

75-09-2 dichloromethane

Oral LD50 2136 mg/kg (rat)

Inhalative LC50/4 h 88 mg/l (rat)

Primary irritant effect:

on the skin: No irritant effect.

on the eye: No 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:

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carc. 2

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:

Danger to drinking water if even small quantities leak into the ground.

Water hazard class 2 (German Regulation) (Self-assessment): 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: UN1593

- **14.2 UN proper shipping name**
  - ADR: 1593 DICHLOROMETHANE
  - IMDG, IATA: DICHLOROMETHANE

- **14.3 Transport hazard class(es)**
  - ADR: 6.1 (T1) Toxic substances.

- **14.4 Packing group**
  - ADR, IMDG, IATA: III

- **14.5 Environmental hazards:**
  - Marine pollutant: No
  - Warning: Toxic substances.
  - Danger code (Kemler): 60
  - EMS Number: F-A, S-A
  - Segregation groups: Liquid halogenated hydrocarbons

- **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Not applicable.

- **Transport/Additional information:**

  - **ADR**
    - Limited quantities (LQ): 5L
    - Excepted quantities (EQ): Code: E1
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 1000 ml

  - **IMDG**
    - Limited quantities (LQ): 5L
    - Excepted quantities (EQ): Code: E1
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 1000 ml

- **Remarks:**
  - Under certain conditions substances in Class 3 (flammable liquids) can be classified in Class 3.
15 Regulatory information

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

UN "Model Regulation":
UN1593, DICHLOROMETHANE, 6.1, III

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
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Department issuing MSDS: QESH Department
Contact: Reach coördinator
Abbreviations and acronyms:
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Carc. 2: Carcinogenicity, Hazard Category 2
Repr. 2: Reproductive toxicity, Hazard Category 2
STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

* Data compared to the previous version altered.