



Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 11/26/2010

Reviewed on 11/26/2010

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



- . **Product details**
- . **Trade name:** Griffon Pool Cement
- . **Application** WDF-05
- . **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
- . **Information department:** R & D Department
- . **Emergency information:** +31 113 235700

2 Composition/information on ingredients

- . **Chemical characterization**
- . **Description:** Adhesive
- . **Dangerous components:**

109-99-9 tetrahydrofuran	50-100%
78-93-3 methyl ethyl ketone	25-50%
872-50-4 N-methyl-2-pyrrolidone	≤ 2.5%
- . **Additional information:**
For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- . **Classification of the substance or mixture**
- . **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
 -  Irritant
Irritating to eyes and respiratory system.
 -  Highly flammable
Highly flammable.
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 was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

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. Label elements

WDF-05

. Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

. Code letter and hazard designation of product:

Irritant
Highly flammable

. Risk phrases:

Highly flammable.
Irritating to eyes and respiratory system.
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.
Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
If swallowed, seek medical advice immediately and show this container or label.
Use only in well-ventilated areas.

. Classification system:**. NFPA ratings (scale 0-4)**

Health = 1
Fire = 3
Reactivity = 0

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 stably 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; immediately call for medical help.**5 Firefighting 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.

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

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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 protection against explosions and fires:**
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 systems:**
No further data; see item 7.
- . **Components with limit values that require monitoring at the workplace:**
 - 109-99-9 tetrahydrofuran**
PEL () 590 mg/m³, 200 ppm
REL () Short-term value: 735 mg/m³, 250 ppm
Long-term value: 590 mg/m³, 200 ppm
TLV () Short-term value: 295 mg/m³, 100 ppm
Long-term value: 147 mg/m³, 50 ppm
Skin
 - 78-93-3 methyl ethyl ketone**
PEL () 590 mg/m³, 200 ppm
REL () Short-term value: 885 mg/m³, 300 ppm
Long-term value: 590 mg/m³, 200 ppm
TLV () Short-term value: 885 mg/m³, 300 ppm
Long-term value: 590 mg/m³, 200 ppm
BEI
 - 872-50-4 N-methyl-2-pyrrolidone**
WEEL () 10 ppm
Skin

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. **Additional information:**

The lists tJWDF-05

. **Personal protective equipment:**

. **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

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.

. **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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**

. **Appearance:**

Form: Fluid

Color: According to product specification

. **Odor:** Characteristic

. **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 65°C (149°F)

. **Flash point:** < 0°C (< 32°F)

. **Ignition temperature:** 230°C (446°F)

. **Auto igniting:** Product is not selfigniting.

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- . **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
- . **Explosion limits:**
 - Lower: 1.5 Vol %
 - Upper: 12.0 Vol %
- . **Vapor pressure at 20°C (68°F):** 200 hPa (150 mm Hg)
- . **Density at 20°C (68°F):** 0.92 g/cm³ (7.677 lbs/gal)
- . **Solubility in / Miscibility with**
 - Water: Not miscible or difficult to mix.
 - Organic solvents: 83.2 %
 - Solids content: 16.8 %

10 Stability and reactivity

- . **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- . **Materials to be avoided:**
- . **Dangerous reactions** No dangerous reactions known.
- . **Dangerous products of decomposition:** Danger of 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 internally approved calculation methods for preparations:
Irritant

12 Ecological information

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

Water hazard class 1 (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 of together with household garbage. Do not allow product to reach sewage system.
- . **Uncleaned packagings:**
- . **Recommendation:**

Disposal must be made according to official regulations.
Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

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* 14 Transport information WDF-05

- . DOT regulations:
- . Hazard class: 3
- . Identification number: UN1133
- . Packing group: II
- . Proper shipping name (technical name): ADHESIVES
- . Label: 3

- . Land transport ADR/RID (cross-border):
- . ADR/RID class: 3 (F1) Flammable liquids
- . Danger code (Kemler): 33
- . UN-Number: 1133
- . Packaging group: II
- . Description of goods: 1133 ADHESIVES, special provision 640D

- . Maritime transport IMDG:
- . IMDG Class: 3
- . UN Number: 1133
- . Label: 3
- . Packaging group: II
- . 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: II
- . 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

- . SARA Section 355 (extremely hazardous substances)
None of the ingredients is listed.
- . SARA Section 313 (specific toxic chemical listings)
 - 78-93-3 methyl ethyl ketone
 - 872-50-4 N-methyl-2-pyrrolidone
- . TSCA (Toxic Substances Control Act)
 - 109-99-9 tetrahydrofuran
 - 78-93-3 methyl ethyl ketone
 - 9002-86-2 polyvinylchloride
 - 872-50-4 N-methyl-2-pyrrolidone
 - 57583-35-4 methyltinmercaptide
 - 9003-39-8 polyvinylpyrrolidon
 - 57583-34-3 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-methyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate
 - 7659-86-1 2-ethylhexyl mercaptoacetate
- . Prop 65 - Chemicals known to cause cancer
None of the ingredients is listed.

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- . **Cancerogenity categories**
- . **EPA (Environmental Protection Agency)**
78-93-3 methyl ethyl ketone: 1
- . **IARC (International Agency for Research on Cancer)**
9002-86-2 polyvinylchloride: 3
9003-39-8 polyvinylpyrrolidon: 3
- . **NTP (National Toxicology Program)**
None of the ingredients is listed.
- . **TLV (Threshold Limit Value established by ACGIH)**
109-99-9 tetrahydrofuran: A3
9002-86-2 polyvinylchloride: A4
57583-34-3 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-methyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate: A4
- . **MAK (German Maximum Workplace Concentration)**
109-99-9 tetrahydrofuran: 4
- . **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.
- . **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.
- . **Chemical safety assessment** A Chemical Safety Assessment has not been carried out.
- . **National regulations:**
- . **Technical instructions (air):**
- . **Class Share in %**
- . **NK** 50-100
- . **Water hazard 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.

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

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