

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2013

Version number 11

Revision: 13.12.2013

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

1.1 Product identifier

Trade name: WDF-05®

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.

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.

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	tetrahydrofuran	50-100%
EINECS: 203-726-8	☒ 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	
CAS: 78-93-3	methyl ethyl ketone	25-50%
EINECS: 201-159-0	☒ Xi R36; ☒ F R11	
Reg.nr.: 01-2119457290-43	R66-67	
	☒ 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**

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 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****9.1 Information on basic physical and chemical properties****General Information****Appearance:****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:

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 %
 - Upper: 12.0 Vol %
- . **Vapour pressure at 20 °C:** 200 hPa
- . **Density at 20 °C:** 0.95 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: 1500 mPas
 - Kinematic: Not determined.
 - Solids content: 16.8 %
- . **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

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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:**
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.
- . **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 640D
- . **IMDG, IATA** ADHESIVES
- . **14.3 Transport hazard class(es)**
- . **ADR**



- . **Class** 3 (F1) Flammable liquids.
- . **Label** 3

. **IMDG, IATA**

- . **Class** 3 Flammable liquids.

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. Label	3
. 14.4 Packing group	
. ADR, IMDG, IATA	II
. 14.5 Environmental hazards:	
. Marine pollutant:	No
. 14.6 Special precautions for user	Warning: Flammable liquids.
. Danger code (Kemler):	33
. 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:	
. ADR	
. Limited quantities (LQ)	5L
. Transport category	2
. 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 640D, 3, II

15 Regulatory information

- . 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- . Labelling according to EU guidelines:
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- . 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.
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.

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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.

. 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

. * Data compared to the previous version altered.

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