



**Safety Data Sheet**

acc. to OSHA HCS

Printing date 07/25/2014

Reviewed on 04/28/2014

**1 Identification**

- . **Product identifier**
- . **Trade name:** BISON BISON KIT ORIGINAL TIN 650ML\*12 L162
- . **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- . **Application of the substance / the mixture** Adhesives
- . **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@boltonadhesives.com
- . **Information department:** Bison QESH
- . **Emergency telephone number:** +31 88 3235700

**2 Hazard(s) identification**

- . **Classification of the substance or mixture**
- . **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
Harmful  
Harmful by inhalation. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Possible risk of harm to the unborn child.  
Irritant  
Irritating to skin.  
Highly flammable  
Highly flammable.  
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- . **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 was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

**Label elements**

- . **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:**



Harmful  
Highly flammable

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Trade name: BISON BISON KIT ORIGINAL TIN 650ML\*12 L162

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- . **Hazard-determining components of labeling:**  
toluene
- . **Risk phrases:**  
Highly flammable.  
Harmful by inhalation.  
Irritating to skin.  
Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment  
Possible risk of harm to the unborn child
- . **Safety phrases:**  
Keep away from sources of ignition - No smoking.  
Do not breathe vapour.  
Avoid contact with skin.  
Wear suitable protective clothing and gloves.  
Avoid release to the environment. Refer to special instructions/Safety data sheets
- . **Special labeling of certain preparations:**  
Contains Colophony. May produce an allergic reaction.
- . **Classification system:**
- . **NFPA ratings (scale 0-4)**



Health = 2  
Fire = 3  
Reactivity = 0

- . **Other hazards**
- . **Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.

**3 Composition/information on ingredients**

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

108-88-3 toluene	25-50%
64742-49-0 Naphtha (petroleum), hydrotreated light	10-25%
67-64-1 acetone	10-25%
78-93-3 ???	2.5-10%
110-54-3 n-hexane	≤ 2.5%
8052-10-6 Colophony	≤ 2.5%
1314-13-2 zinc oxide	≤ 2.5%
- . **Additional information:**  
For the wording of the listed risk phrases refer to section 16.

**4 First-aid measures**

- . **Description of first aid measures**
- . **General information:**  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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- . **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:** Immediately wash with water and soap and rinse thoroughly.
- . **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.
- . **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 Fire-fighting measures**

- . **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
- . **Special hazards arising from the substance or mixture**  
No further relevant information available.
- . **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**

- . **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- . **Environmental precautions:**  
Prevent seepage into sewage system, workpits and cellars.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- . **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.
- . **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**

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

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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.

**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.

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

**8 Exposure controls/personal protection**

**Additional information about design of technical systems:**

No further data; see item 7.

**Control parameters**

**Components with limit values that require monitoring at the workplace:**

**108-88-3 toluene**

PEL ( ) Long-term value: 200 ppm  
Ceiling limit value: 300; 500\* ppm  
\*10-min peak per 8-hr shift

REL ( ) Short-term value: 560 mg/m<sup>3</sup>, 150 ppm  
Long-term value: 375 mg/m<sup>3</sup>, 100 ppm

TLV ( ) Long-term value: 75 mg/m<sup>3</sup>, 20 ppm  
BEI

**Ingredients with biological limit values:**

**108-88-3 toluene**

BEI ( ) 0.02 mg/L  
Medium: blood  
Time: prior to last shift of workweek  
Parameter: Toluene

0.03 mg/L  
Medium: urine  
Time: end of shift  
Parameter: Toluene

0.3 mg/g creatinine  
Medium: urine  
Time: end of shift  
Parameter: o-Cresol with hydrolysis (background)

**67-64-1 acetone**

BEI ( ) 50 mg/L  
Medium: urine  
Time: end of shift  
Parameter: Acetone (nonspecific)

**Additional information:**

The lists that were valid during the creation were used as basis.

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- . **Exposure controls**
- . **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.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the skin.  
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.
- . **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:**  
Use protective suit.  
Solvent resistant protective clothing

**9 Physical and chemical properties**

- . **Information on basic physical and chemical properties**
- . **General Information**
- . **Appearance:**
  - Form:** Fluid
  - Color:** According to product specification

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- . **Odor:** Characteristic
- . **Odour threshold:** Not determined.
- . **pH-value:** Not determined.
- . **Change in condition**
  - Melting point/Melting range:** Undetermined.
  - Boiling point/Boiling range:** 60 °C (140 °F)
- . **Flash point:** < 0 °C (< 32 °F)
- . **Flammability (solid, gaseous):** Not applicable.
- . **Ignition temperature:** 465 °C (869 °F)
- . **Decomposition temperature:** Not determined.
- . **Auto igniting:** Product is not selfigniting.
- . **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
- . **Explosion limits:**
  - Lower:** 1.2 Vol %
  - Upper:** 13.0 Vol %
- . **Vapor pressure at 20 °C (68 °F):** 233 hPa (175 mm Hg)
- . **Density at 20 °C (68 °F):** 0.86 g/cm<sup>3</sup> (7.177 lbs/gal)
- . **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 (68 °F):** 3500 mPas
  - Kinematic:** Not determined.
  - Organic solvents:** 78.4 %
  - Water:** 0.2 %
  - Solids content:** 21.4 %
- . **Other information** No further relevant information available.

**10 Stability and reactivity**

- . **Reactivity**
- . **Chemical stability**
- . **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- . **Possibility of hazardous reactions** No dangerous reactions known.
- . **Conditions to avoid** No further relevant information available.
- . **Incompatible materials:** No further relevant information available.
- . **Hazardous decomposition products:** Danger of toxic pyrolysis products.

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\* **11 Toxicological information**

- . **Information on toxicological effects**
- . **Acute toxicity:**
- . **LD/LC50 values that are relevant for classification:**
  - 108-88-3 toluene
  - Oral LD50 5000 mg/kg (rat)
  - Dermal LD50 12124 mg/kg (rab)
  - Inhalative LC50/4 h 5320 mg/l (mus)
- . **Primary irritant effect:**
- . **on the skin:** Irritant to skin and mucous membranes.
- . **on the eye:** No irritating effect.
- . **Sensitization:** No sensitizing effects known.
- . **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful  
Irritant
- . **Carcinogenic categories**
- . **IARC (International Agency for Research on Cancer)**
  - 108-88-3 toluene: 3
  - 9010-98-4 Polychlorobutadiene rubber: 3
  - formaldehyd: 1
- . **NTP (National Toxicology Program)**
  - formaldehyd: R
- . **OSHA-Ca (Occupational Safety & Health Administration)**
  - formaldehyd

**12 Ecological information**

- . **Toxicity**
- . **Aquatic toxicity:** No further relevant information available.
- . **Persistence and degradability** No further relevant information available.
- . **Bioaccumulative potential** No further relevant information available.
- . **Mobility in soil** No further relevant information available.
- . **Ecotoxicological effects:**
- . **Remark:** Harmful to fish
- . **Additional ecological information:**
- . **General notes:**

Danger to drinking water if even small quantities leak into the ground.  
Harmful to aquatic organisms  
Water hazard class 2 (Self-assessment): hazardous for water
- . **Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.
- . **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- . Waste treatment methods
- . 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.

\* 14 Transport information

- . UN-Number
- . DOT, IMDG, IATA UN1133
- . UN proper shipping name
- . DOT Adhesives
- . ADR 1133 Adhesives, special provision 640H
- . IMDG, IATA ADHESIVES
- . Transport hazard class(es)
- . DOT



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

IMDG, IATA



- . Class 3 Flammable liquids
- . Label 3
- . Packing group
- . DOT, IMDG, IATA III
- . Environmental hazards:
- . Marine pollutant: No
- . Special precautions for user Warning: Flammable liquids
- . Danger code (Kemler): 33
- . EMS Number: F-E,S-D
- . Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

Transport/Additional information:

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

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- . Maximum net quantity per outer packaging: 1000 ml
- . **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

**15 Regulatory information**

- . **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- . **SARA Section 355 (extremely hazardous substances)**  
formaldehyd
- . **SARA Section 313 (specific toxic chemical listings)**  
108-88-3 toluene  
78-93-3 methyl ethyl ketone  
110-54-3 n-hexane  
1314-13-2 zinc oxide  
formaldehyd
- . **TSCA (Toxic Substances Control Act)**  
All ingredients are listed.
- . **Prop 65 - Chemicals known to cause cancer**  
formaldehyd
- . **Carcinogeny categories**
- . **EPA (Environmental Protection Agency)**  
108-88-3 toluene: II  
67-64-1 acetone: I  
78-93-3 methyl ethyl ketone: I  
110-54-3 n-hexane: II  
1314-13-2 zinc oxide: D, I, II  
formaldehyd: B1
- . **TLV (Threshold Limit Value established by ACGIH)**  
108-88-3 toluene: A4  
67-64-1 acetone: A4  
1309-48-4 magnesium oxide: A4  
formaldehyd: A2
- . **MAK (German Maximum Workplace Concentration)**  
formaldehyd: 4
- . **NIOSH-Ca (National Institute for Occupational Safety and Health)**  
formaldehyd
- . **Product related hazard informations:**  
The product has been classified and marked in accordance with directives on hazardous materials.
- . **Hazard symbols:**



Harmful  
Highly flammable

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- . **Hazard-determining components of labeling:**  
toluene
- . **Risk phrases:**  
Highly flammable.  
Harmful by inhalation.  
Irritating to skin.  
Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment  
Possible risk of harm to the unborn child
- . **Safety phrases:**  
Keep away from sources of ignition - No smoking.  
Do not breathe vapour.  
Avoid contact with skin.  
Wear suitable protective clothing and gloves.  
Avoid release to the environment. Refer to special instructions/Safety data sheets
- . **Special labeling of certain preparations:**  
Contains Colophony. May produce an allergic reaction.
- . **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.

- . **Department issuing MSDS:** QESH Department
- . **Contact:** Reach coördinator
- . **Date of preparation / last revision** 07/25/2014 / 20
- . **\* Data compared to the previous version altered.**

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Safety Data Sheet

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1 Identification

- Product identifier
Trade name: BISON BISON KIT ORIGINAL TIN 650ML\*12 L162
Application of the substance / the mixture Adhesives
Details of the supplier of the safety data sheet
Manufacturer/Supplier: Bison International
Information department: Bison QESH
Emergency telephone number: +31 88 3235700

2 Composition/information on ingredients

- Chemical characterization: Mixtures
Description: Adhesive
Dangerous components: 108-88-3 toluene 25-50%, 64742-49-0 Naphtha (petroleum), hydrotreated light 10-25%, 67-64-1 acetone 10-25%, 78-93-3 2.5-10%, 110-54-3 n-hexane <= 2.5%, 8052-10-6 Colophony <= 2.5%, 1314-13-2 zinc oxide <= 2.5%

3 Hazard(s) identification

- Classification of the substance or mixture
Flam. Liq. 2 H225 Highly flammable liquid and vapor.
Repr. 2 H361 Suspected of damaging fertility or the unborn child.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H336 May cause drowsiness or dizziness.

- Label elements
GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).

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Fire-extinguishing powder  
Carbon dioxide

- . **For safety reasons unsuitable extinguishing agents:** Water with full jet
- . **Special hazards arising from the substance or mixture**  
No further relevant information available.
- . **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**

- . **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- . **Environmental precautions:**  
Prevent seepage into sewage system, workpits and cellars.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- . **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.
- . **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**

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

**8 Exposure controls/personal protection**

- . **Additional information about design of technical systems:**  
No further data; see item 7.

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**Components with limit values that require monitoring at the workplace:**

**108-88-3 toluene**

- PEL (USA) Long-term value: 200 ppm  
Ceiling limit value: 300; 500\* ppm  
\*10-min peak per 8-hr shift
- REL (USA) Short-term value: 560 mg/m<sup>3</sup>, 150 ppm  
Long-term value: 375 mg/m<sup>3</sup>, 100 ppm
- TLV (USA) Long-term value: 75 mg/m<sup>3</sup>, 20 ppm  
BEI

**Ingredients with biological limit values:**

**108-88-3 toluene**

- BEI (USA) 0.02 mg/L  
Medium: blood  
Time: prior to last shift of workweek  
Parameter: Toluene
  
- 0.03 mg/L  
Medium: urine  
Time: end of shift  
Parameter: Toluene
  
- 0.3 mg/g creatinine  
Medium: urine  
Time: end of shift  
Parameter: o-Cresol with hydrolysis (background)

**67-64-1 acetone**

- BEI (USA) 50 mg/L  
Medium: urine  
Time: end of shift  
Parameter: Acetone (nonspecific)

**Additional information:**

The lists that were valid during the creation were used as basis.

**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.  
 Do not inhale gases / fumes / aerosols.  
 Avoid contact with the skin.  
 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.

**Protection of hands:**



Protective gloves

Solvent resistant gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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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:**

Use protective suit.  
Solvent resistant protective clothing

**9 Physical and chemical properties**

. **General Information**

. **Appearance:**

Form: Fluid  
Color: According to product specification

. **Odor:** Characteristic  
. **Odour threshold:** Not determined.

. **pH-value:** Not determined.

. **Change in condition**

Melting point/Melting range: Undetermined.  
Boiling point/Boiling range: 60 °C (140 °F)

. **Flash point:** < 0 °C (< 32 °F)

. **Flammability (solid, gaseous):** Not applicable.

. **Ignition temperature:** 465 °C (869 °F)

. **Decomposition temperature:** Not determined.

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

. **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

. **Explosion limits:**

Lower: 1.2 Vol %  
Upper: 13.0 Vol %

. **Vapor pressure at 20 °C (68 °F):** 233 hPa (175 mm Hg)

. **Density at 20 °C (68 °F):** 0.86 g/cm<sup>3</sup> (7.177 lbs/gal)

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- . **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 (68 °F):** 3500 mPas
  - Kinematic:** Not determined.
  - Organic solvents:** 78.4 %
  - Water:** 0.2 %
  - Solids content:** 21.4 %
- . **Other information** No further relevant information available.

**10 Stability and reactivity**

- . **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- . **Incompatible materials:** No further relevant information available.
- . **Hazardous decomposition products:** Danger of toxic pyrolysis products.

**11 Toxicological information**

- . **Acute toxicity:**
- . **LD/LC50 values that are relevant for classification:**
  - 108-88-3 toluene
  - Oral LD50 5000 mg/kg (rat)
  - Dermal LD50 12124 mg/kg (rab)
  - Inhalative LC50/4 h 5320 mg/l (mus)
- . **Primary irritant effect:**
  - on the skin:** Irritant to skin and mucous membranes.
  - on the eye:** No irritating effect.
- . **Sensitization:** No sensitizing effects known.
- . **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

  - Harmful
  - Irritant
- . **Carcinogenic categories**
- . **IARC (International Agency for Research on Cancer)**
  - 108-88-3 toluene: 3
  - 9010-98-4 Polychlorobutadiene rubber: 3
  - formaldehyd: 1
- . **NTP (National Toxicology Program)**
  - formaldehyd: R
- . **OSHA-Ca (Occupational Safety & Health Administration)**
  - formaldehyd

**12 Ecological information**

- . **Aquatic toxicity:** No further relevant information available.

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- . **Persistence and degradability** No further relevant information available.
- . **Bioaccumulative potential** No further relevant information available.
- . **Ecotoxicological effects:**
- . **Remark:** Harmful to fish
- . **Additional ecological information:**
- . **General notes:**  
 Danger to drinking water if even small quantities leak into the ground.  
 Harmful to aquatic organisms  
 Water hazard class 2 (Self-assessment): hazardous for water

**13 Disposal considerations**

- . **Waste treatment methods**
- . **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.

**14 Transport information**

- . **UN-Number**
- . **DOT, ADR, IMDG, IATA** UN1133
- . **UN proper shipping name**
- . **DOT** Adhesives
- . **ADR** 1133 Adhesives, special provision 640H
- . **IMDG, IATA** ADHESIVES
- . **Transport hazard class(es)**

. DOT



- . **Class** 3 Flammable liquids
- . **Label** 3

. ADR



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

. **IMDG, IATA**



- . **Class** 3 Flammable liquids
- . **Label** 3

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- . Packing group III
- . DOT, ADR, IMDG, IATA
- . Environmental hazards:
- . Marine pollutant: No
- . Special precautions for user Warning: Flammable liquids
- . Danger code (Kemler): 33
- . EMS Number: F-E,S-D
- . Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
- . Transport/Additional information:

- . ADR
- . 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 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**

- . SARA Section 355 (extremely hazardous substances) formaldehyd
- . SARA Section 313 (specific toxic chemical listings)
  - 108-88-3 toluene
  - 78-93-3 methyl ethyl ketone
  - 110-54-3 n-hexane
  - 1314-13-2 zinc oxide
  - formaldehyd
- . TSCA (Toxic Substances Control Act)  
All ingredients are listed.
- . Prop 65 - Chemicals known to cause cancer  
formaldehyd
- . Cancerogenity categories
- . EPA (Environmental Protection Agency)
  - 108-88-3 toluene: II
  - 67-64-1 acetone: I
  - 78-93-3 methyl ethyl ketone: I

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110-54-3 n-hexane: II  
1314-13-2 zinc oxide: D, I, II  
formaldehyd: B1

. **TLV (Threshold Limit Value established by ACGIH)**

108-88-3 toluene: A4  
67-64-1 acetone: A4  
1309-48-4 magnesium oxide: A4  
formaldehyd: A2

. **MAK (German Maximum Workplace Concentration)**

formaldehyd: 4

. **NIOSH-Ca (National Institute for Occupational Safety and Health)**

formaldehyd

. **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

. **Hazard pictograms**



GHS02 GHS07 GHS08

. **Signal word** Danger

. **Hazard-determining components of labeling:**

toluene  
Colophony

. **Hazard statements**

H225 Highly flammable liquid and vapor.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H361 Suspected of damaging fertility or the unborn child.  
H336 May cause drowsiness or dizziness.  
H373 May cause damage to organs through prolonged or repeated exposure.

. **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P260 Do not breathe vapours.  
P281 Use personal protective equipment as required.  
P370+P378 In case of fire: Use to extinguish: Water haze, Alcohol resistant foam, Fire-extinguishing powder, Carbon dioxide.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P501 Dispose of contents/container in accordance with national regulations.

**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:** QESH Department

. **Contact:** Reach coördinator

. **Date of preparation / last revision** 07/25/2014 / 20

. **Abbreviations and acronyms:**

Flam. Liq. 2: Flammable liquids, Hazard Category 2  
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

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Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A  
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1  
Repr. 2: Reproductive toxicity, Hazard Category 2  
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3  
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

. \* **Data compared to the previous version altered.**

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