=

Printing date 29.01.2015

# Safety data sheet

## according to 1907/2006/EC, Article 31

Version number 70

Page 1/10

Revision: 29.01.2015

\*

* ***1.1 Product identifier***
* ***Trade name:* ST3294**
* ***Article number:* ST3294 A**
* ***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****Adhesives*
* ***1.3 Details of the supplier of the safety data sheet***
* ***Manufacturer/Supplier:***

Bondchem Ltd

Uniots 9&10 Lawson Street

Dock Road Ind Est, North Shields, Tyne and Wear NE29 6TF

* ***Informing department:***

*Product safety department:* [info@bondchem.com](mailto:info@bondchem.com)

* ***1.4 Emergency telephone number:*** +44(0)191 2586990

|  |
| --- |
| ***SECTION 1: Identification of the substance/mixture and of the company/undertaking*** |

\*

|  |
| --- |
| ***SECTION 2: Hazards identification*** |

### 2.1 Classification of the substance or mixture

* ***Classification according to Regulation (EC) No 1272/2008***

GHS02 flame

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

GHS07



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H335 May cause respiratory irritation.

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

 Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.



Xi; Sensitising

R43: May cause sensitisation by skin contact.



F; Highly flammable

R11: Highly flammable.

### 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 in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

(Contd. on page 2)

GB

* ***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*** *GHS02, GHS07*
* ***Signal word*** *Danger*
* ***Hazard-determining components of labelling:***

methyl methacrylate

2-hydroxyethyl methacrylate 2,3-epoxypropyl methacrylate hydroquinone

* ***Hazard statements***

H225 Highly flammable liquid and vapour. H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.

* ***Precautionary statements***

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

\*

* ***3.2 Chemical characterisation: Mixtures***
* ***Description:*** *Adhesive.*

(Contd. on page 3)

|  |
| --- |
| ***SECTION 3: Composition/information on ingredients*** |

|  |  |  |
| --- | --- | --- |
| * ***Dangerous components:*** | | |
| *CAS: 80-62-6*  *EINECS: 201-297-1* | *methyl methacrylate*  *Xi R37/38; Xi R43; F R11* | *25-50%* |
| *Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335* |
| *CAS: 868-77-9*  *EINECS: 212-782-2* | *2-hydroxyethyl methacrylate*  *Xi R36/38; Xi R43* | *10-25%* |
| *Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317* |
| *CAS: 106-91-2*  *EINECS: 203-441-9* | *2,3-epoxypropyl methacrylate*  *Xn R20/21/22; Xi R36/38; Xi R43* | *1-5%* |
| *Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit.*  *2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317* |

GB

|  |  |  |
| --- | --- | --- |
| *CAS: 80-15-9*  *EINECS: 201-254-7* | *α,α -dimethylbenzyl hydroperoxide*  *T R23; C R34; Xn R21/22-48/20/22; O R7; N R51/53* | *< 2.5%* |
| *Org. Perox. EF, H242; Acute Tox. 3, H331; STOT RE 2, H373;*  *Skin Corr. 1B, H314;*  *Aquatic Chronic 2, H411;*  *Acute Tox. 4, H302; Acute Tox. 4, H312* |
| *CAS: 123-31-9*  *EINECS: 204-617-8* | *hydroquinone*  *Xn R22-40-68;*  *Xi R41;*  *Xi R43;*  *N R50*  *Carc. Cat. 3, Muta. Cat. 3* | *< 0.5%* |
| *Muta. 2, H341; Carc. 2, H351; Eye Dam. 1, H318; Aquatic Acute 1, H400;*  *Acute Tox. 4, H302; Skin Sens. 1, H317* |

\*

* ***Additional information*** *For the wording of the listed risk phrases refer to section 16.*
* ***4.1 Description of first aid measures***
* ***General information*** *Instantly remove any clothing soiled by the product.*
* ***After inhalation***

*Supply fresh air and call for doctor for safety reasons.*

*In case of unconsciousness bring patient into stable side position for transport.*

* ***After skin contact***

*Instantly wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.*

* ***After eye contact***

*Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.*

* ***After swallowing*** *In case of persistent symptoms 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.*

|  |
| --- |
| ***SECTION 4: First aid measures*** |

\*

* ***5.1 Extinguishing media***
* ***Suitable extinguishing agents***

*CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam. CO2, sand, extinguishing powder. Do not use water.*

* ***For safety reasons unsuitable extinguishing agents***

*Water.*

*Water with a full water jet.*

* ***5.2 Special hazards arising from the substance or mixture***

*Formation of poisonous gases during heating or in fires.*

* ***5.3 Advice for firefighters***
* ***Protective equipment:*** *Do not inhale explosion gases or combustion gases.*

|  |
| --- |
| ***SECTION 5: Firefighting measures*** |

\*

* ***6.1 Personal precautions, protective equipment and emergency procedures***

*Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation*

*Wear protective clothing.*

* ***6.2 Environmental precautions:***

*Prevent from spreading (e.g. by damming-in or oil barriers). Prevent material from reaching sewage system, holes and cellars.*

*Inform respective authorities in case product reaches water or sewage system. Do not allow to enter drainage system, surface or ground water.*

(Contd. on page 4)

|  |
| --- |
| ***SECTION 6: Accidental release measures*** |

GB

* ***6.3 Methods and material for containment and cleaning up:***

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

Do not flush with water or aqueous cleansing agents

* ***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 information on disposal.

\*

* ***7.1 Precautions for safe handling***

*Store in cool, dry place in tightly closed containers. Keep away from heat and direct sunlight.*

*Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.*

* ***Information about protection against explosions and fires:***

*Keep ignition sources away - Do not smoke. Protect from heat.*

*Protect against electrostatic charges.*

* ***7.2 Conditions for safe storage, including any incompatibilities***
* ***Storage***
* ***Requirements to be met by storerooms and containers:*** *Store in cool location.*
* ***Information about storage in one common storage facility:*** *Not required.*
* ***Further information about storage conditions:***

*Keep container tightly sealed.*

*Store in cool, dry conditions in well sealed containers.*

* ***Storage class*** *3*
* ***7.3 Specific end use(s)*** *No further relevant information available.*

|  |
| --- |
| ***SECTION 7: Handling and storage*** |

\*

* ***Additional information about design of technical systems:*** *No further data; see item 7.*
* ***8.1 Control parameters***
* ***Additional information:*** *The lists that were valid during the compilation were used as basis.*
* ***8.2 Exposure controls***
* ***Personal protective equipment***
* ***General protective and hygienic measures*** *Keep away from foodstuffs, beverages and food. Take off immediately all contaminated clothing*

*Wash hands during breaks and at the end of the work. Avoid contact with the eyes and skin.*

* ***Breathing equipment:***

*Not necessary if room is well-ventilated.*

*Use breathing protection in case of insufficient ventilation.*

* ***Protection of hands:***

*Protective gloves.*

*The glove material has to be impermeable and resistant to the preparation.*

(Contd. on page 5)

|  |
| --- |
| ***SECTION 8: Exposure controls/personal protection*** |

|  |  |
| --- | --- |
| * ***Components with limit values that require monitoring at the workplace:*** | |
| ***80-62-6 methyl methacrylate*** | |
| *WEL* | *Short-term value: 416 mg/m³, 100 ppm*  *Long-term value: 208 mg/m³, 50 ppm* |

GB

(Contd. of page 4) 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:*** *Tightly sealed safety glasses.*

\*

(Contd. on page 6)

|  |
| --- |
| ***SECTION 9: Physical and chemical properties*** |

|  |  |
| --- | --- |
| * ***9.1 Information on basic physical and chemical properties*** * ***General Information*** * ***Appearance:***   ***Form:*** *Fluid*  ***Colour:*** *Green*   * ***Odour:*** *Characteristic* * ***Odour threshold:*** *Not determined.* | |
| * ***pH-value:*** | *Not determined.* |
| * ***Change in condition***   ***Melting point/Melting range: Boiling point/Boiling range:*** | *Not determined 101 °C* |
| * ***Flash point:*** | *10 °C* |
| * ***Inflammability (solid, gaseous)*** | *Not applicable.* |
| * ***Ignition temperature:*** | *430 °C* |
| * ***Decomposition temperature:*** | *Not determined.* |
| * ***Self-inflammability:*** | *Product is not selfigniting.* |
| * ***Danger of explosion:*** | *Product is not explosive.* |
| * ***Critical values for explosion: Lower:***   ***Upper:*** | *2.1 Vol %*  *12.5 Vol %* |
| * ***Vapour pressure at 20 °C:*** | *47 hPa* |
| * ***Density at 20 °C*** | *1 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: kinematic:*** | *1000 mPas*  *Not determined.* |

GB

|  |
| --- |
| * ***Solvent content:***   ***Organic solvents:*** *0.0 %*  ***Water:*** *0.0 %*  ***VOC (EU)*** *0.00 %* |
| ***Solids content:*** *0.2 %*   * ***9.2 Other information*** *No further relevant information available.* |

\*

(Contd. of page 5)

* ***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:*** *Carbon monoxide and carbon dioxide*

|  |
| --- |
| ***SECTION 10: Stability and reactivity*** |

\*

* ***11.1 Information on toxicological effects***
* ***Acute toxicity:***
* ***Primary irritant effect:***
* ***on the skin:*** *Irritant to skin and mucous membranes.*
* ***on the eye:*** *Irritant effect.*
* ***Sensitisation:*** *Sensitization possible by skin contact.*
* ***Additional toxicological information:***

*The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:*

*Irritant*

|  |
| --- |
| ***SECTION 11: Toxicological information*** |

|  |  |  |
| --- | --- | --- |
| * ***LD/LC50 values that are relevant for classification:*** | | |
| ***106-91-2 2,3-epoxypropyl methacrylate*** | | |
| *Oral*  *Dermal* | *LD50*  *LD50* | *597 mg/kg (rat)*  *469 mg/kg (rabbit)* |
| ***80-15-9 α,α -dimethylbenzyl hydroperoxide*** | | |
| *Oral*  *Dermal Inhalative* | *LD50*  *LD50 LC50/4 h* | *382 mg/kg (rat)*  *500 mg/kg (rat)*  *1.25 mg/l (rat)* |

\*

* ***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 2 (German Regulation) (Self-assessment): hazardous for water. Do not allow product to reach ground water, water bodies or sewage system.*

*Danger to drinking water if even small quantities leak into soil.*

(Contd. on page 7)

|  |
| --- |
| ***SECTION 12: Ecological information*** |

GB

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

\*

* ***13.1 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.*

|  |
| --- |
| ***SECTION 13: Disposal considerations*** |

|  |  |
| --- | --- |
| * ***European waste catalogue*** | |
| *08 00 00* | *WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF*  *COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS* |
| *08 04 00* | *wastes from MFSU of adhesives and sealants (including waterproofing products)* |
| *08 04 09\** | *waste adhesives and sealants containing organic solvents or other dangerous substances* |

\*

(Contd. on page 8)

|  |
| --- |
| ***SECTION 14: Transport information*** |

|  |
| --- |
| * ***14.1 UN-Number*** * ***ADR, IMDG, IATA*** *UN1133* |
| * ***14.2 UN proper shipping name*** |
| * ***ADR*** *1133 ADHESIVES (vapour pressure at 50 °C not more* |
| *than 110 kPa)* |
| * ***IMDG, IATA*** *ADHESIVES* |
| * ***14.3 Transport hazard class(es)*** |
| * ***ADR, IMDG, IATA*** |
|  |
| * ***Class*** *3 Flammable liquids.* |
| * ***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.* * ***Kemler Number:*** *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.* |

GB

|  |
| --- |
| * ***Transport/Additional information:*** |
| * ***ADR*** * ***Limited quantities (LQ)*** *5L* * ***Excepted quantities (EQ)*** *Code: E2*   *Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml*   * ***Transport category*** *2* * ***Tunnel restriction code*** *D/E* |
| * ***IMDG*** * ***Limited quantities (LQ)*** *5L* * ***Excepted quantities (EQ)*** *Code: E2*   *Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml* |
| * ***UN "Model Regulation":*** *UN1133, ADHESIVES (vapour pressure at 50 °C not more than 110 kPa), 3, II* |

\*

|  |
| --- |
| ***SECTION 15: Regulatory information*** |

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

* ***Labelling according to Regulation (EC) No 1272/2008***

The product is classified and labelled according to the CLP regulation.

* ***Hazard pictograms*** *GHS02, GHS07*
* ***Signal word*** *Danger*

### Hazard-determining components of labelling:

methyl methacrylate

2-hydroxyethyl methacrylate 2,3-epoxypropyl methacrylate hydroquinone

### Hazard statements

H225 Highly flammable liquid and vapour. H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.

### Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### National regulations

* ***Technical instructions (air):***

|  |  |
| --- | --- |
| ***Class*** | ***Share in %*** |
| *I* | *2.2* |

* ***Water hazard class:*** *Water hazard class 2 (Self-assessment): hazardous for water.*

(Contd. on page 9)

GB

Printing date 29.01.2015

# Safety data sheet

## according to 1907/2006/EC, Article 31

Version number 70

Page 9/10

Revision: 29.01.2015

***Trade name: Penloc ®***

***GTI Part A***

(Contd. of page 8)

* ***15.2 Chemical safety assessment:*** *A Chemical Safety Assessment has not been carried uot.*

\*

|  |
| --- |
| ***SECTION 16: Other information*** |

These data are based on our present knowledge. Howveer, they shall not constitute a guarantee for any specific product features and shall not establish alegally valid contractual relationship.

### Relevant phrases

H225 Highly flammable liquid and vapour. H242 Heating may cause a fire.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage. H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

H319 Causes serious eye irritation. H331 Toxic if inhaled.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H341 Suspected of causing genetic defects. H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged orrepeated exposure. H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting euects.

R11 Highly flammable.

R20/21/22 Harmful by inhalation, in contact with skni and if swallowed. R21/22 Harmful in contact with skin and if swallowed.

R22 Harmful if swallowed.

R23 Toxic by inhalation.

R34 Causes burns.

R36/38 Irritating to eyes and skin.

R37/38 Irritating to respiratory system and skin. R40 Limited evidence of a carcinogenic euect. R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

R48/20/22 Harmful: danger of serious damage to healht by prolonged exposure through inhalation and if swallowed.

R50 Very toxic to aquatic organisms.

R51/53 Toxic to aquatic organisms, may cause long-term adverse euects in the aquatic environment. R68 Possible risk of irreversible euects.

R7 May cause fire.

* ***Department issuing data specification sheet:****Environment protection department.*

### Abbreviations and acronyms:

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*ICAO: International Civil Aviation Organisation*

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association*

*GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society) VOC: Volatile Organic Compounds (USA, EU)*

*LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent*

*Flam. Liq. 2: Flammable liquids, Hazard Category 2*

(Contd. on page 10)

GB

Printing date 29.01.2015

# Safety data sheet

## according to 1907/2006/EC, Article 31

Version number 70

Page 10/10

Revision: 29.01.2015

***Trade name: Penloc ®***

***GTI Part A***

GB

(Contd. of page 9)

*Org. Perox. EF: Organic Peroxides, Types E, F Acute Tox. 4: Acute toxicity, Hazard Category 4 Acute Tox. 3: Acute toxicity, Hazard Category 3*

*Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2*

*Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1*

*Muta. 2: Germ cell mutagenicity, Hazard Category 2 Carc. 2: Carcinogenicity, 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 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1*

*Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2*

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