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**SAFETY DATA SHEET**

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

## 1.1 Product identifier

- Product Name: Smartseal Sealer Repair Fluid
- Chemical Name: Xylene
- Synonyms: Dimethylbenzene
- CAS Number: 1330-20-7
- EC Number: 215-535-7
- Index No.: 601-022-00-9
- REACH Registration Number: 01-2119488216-32-XXXX

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/mixture: Solvent
- Use advised against: No information available

## 1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Smartseal UK Ltd
- Address of Supplier: Unit 3  
65-67 Cutlers Road  
South Woodham Ferrers  
Chelmsford  
Essex  
CM3 5WA  
UK
- Telephone: +44 (0) 1268 722500
- Email: [contactus@smartseal.co.uk](mailto:contactus@smartseal.co.uk)

## 1.4 Emergency telephone number

- Emergency Telephone: +44 (0) 1268 722500  
(office hours only Mon – Fri 08:30 – 17:30)

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**SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Flam. Liq. 3, H226; Asp. Tox. 1, H304; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Acute Tox. 4, H332; STOT SE 3, H335; STOT RE 2, H373; Aquatic Chronic 3, H412
- Additional information: For full text of Hazard- and EU Hazard-statements: see section 16

## 2.2 Label elements



- Signal Word: Danger
- Hazard statements  
H226 - Flammable liquid and vapour.  
H304 - May be fatal if swallowed and enters airways.  
H302+H312 - Harmful if swallowed or in contact with skin  
H315 - Causes skin irritation

## **SECTION 2: Hazards identification (....)**

H319 - Causes serious eye irritation.  
H335 - May cause respiratory irritation.  
H373 - May cause damage to organs through prolonged or repeated exposure.  
H412 - Harmful to aquatic life with long lasting effects.

- Precautionary statements
  - P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
  - P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
  - P332+P313 - If skin irritation occurs: Get medical advice/attention.
- Supplemental Hazard Information (EU)  
None

### 2.3 Other hazards

- Not a PBT according to REACH Annex XIII
  - Not a vPvB according to REACH Annex XIII
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## **SECTION 3: Composition/information on ingredients**

### 3.1 Substances

- xylene
  - CAS Number: 1330-20-7
  - EC Number: 215-535-7
  - Index No.: 601-022-00-9
  - Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Flam. Liq. 3, H226; Asp. Tox. 1, H304; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Acute Tox. 4, H332; STOT SE 3, H335; STOT RE 2, H373; Aquatic Chronic 3, H412
  - REACH Registration Number: 01-2119488216-32-XXXX

### 3.2 Mixtures

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## **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

- Contact with eyes
  - If substance has got into eyes, immediately wash out with plenty of water for several minutes
  - Irrigate eyes thoroughly whilst lifting eyelids
  - Remove contact lenses, if present and easy to do. Continue rinsing.
  - If eye irritation persists: Get medical advice/attention.
- Contact with skin
  - Take off contaminated clothing and wash it before reuse.
  - Wash affected area with plenty of soap and water
  - If skin irritation occurs: Get medical advice/attention.
- Ingestion
  - Rinse mouth with water (do not swallow)
  - Do NOT induce vomiting.
  - Get immediate medical advice/attention.
- Inhalation
  - If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

## **SECTION 4: First aid measures (....)**

Keep warm and at rest, in a half upright position. Loosen clothing  
Apply artificial respiration only if patient is not breathing but do not use mouth to mouth resuscitation  
Immediately call a POISON CENTER or doctor/physician.

### 4.2 Most important symptoms and effects, both acute and delayed

- Contact with eyes  
Causes redness and irritation
- Contact with skin  
May be harmful if absorbed through skin  
Prolonged skin contact will result in defatting of the skin, leading to irritation, and in some cases, dermatitis  
Causes redness and irritation
- Ingestion  
Can cause damage to the central nervous system  
Can cause damage to the liver  
Can cause damage to the kidneys  
May be fatal if swallowed and enters airways.  
Causes nausea/vomiting
- Inhalation  
Effect may vary from irritation of the nasal mucous membrane to severe lung irritation.  
Can cause damage to the central nervous system  
Causes dizziness, confusion, headache or stupor  
May cause breathing difficulty

### 4.3 Indication of any immediate medical attention and special treatment needed

- Consider gastric lavage with protected airway, administration of activated charcoal.
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## **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

- In case of fire use water spray or fog, alcohol resistant foam, dry chemical or carbon dioxide
- Unsuitable extinguishing media: high volume water jet

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

- Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback
- May form explosive vapour/air mixtures
- In a fire or if heated, a pressure increase will occur and the container may burst
- Decomposition products may include carbon oxides
- Decomposition products may include hydrocarbons

### 5.3 Advice for firefighters

- Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains. Prevent fire extinguishing water from contaminating surface or ground water.
  - Collect extinguishing media and dispose of as hazardous waste
  - Keep container(s) exposed to fire cool, by spraying with water
  - Special protective equipment: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit.
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## **SECTION 6: Accidental release measures**

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

- Rescuers should take suitable precautions to avoid becoming casualties themselves
  - Shut off all ignition sources
  - In confined spaces, sewers, etc., the vapours may collect to form explosive mixtures with air
-

## **SECTION 6: Accidental release measures (....)**

- Personal precautions for non-emergency personnel: Avoid breathing vapours, mist or gas; Avoid contact with skin and eyes; Wear protective clothing as per section 8; Wash thoroughly after handling.
- Personal precautions for emergency responders: Evacuate the area and keep personnel upwind; Wear chemical protection suit; Wear self-contained breathing apparatus (SCBA).

### 6.2 Environmental precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- If polluted water reaches drainage systems or water courses, immediately inform appropriate authorities

### 6.3 Methods and material for containment and cleaning up

- Stop leak if safe to do so.
- In case of leakage, eliminate all ignition sources.
- Use non-sparking tools.
- Take action to prevent static discharges.
- Contain the spillage using bunding
- Absorb spillage in inert material and shovel up
- Place in appropriate container
- Seal containers and label them
- Remove contaminated material to safe location for subsequent disposal
- Dispose of contents/container to an authorised waste collection point
- To be disposed of as hazardous waste

### 6.4 Reference to other sections

- See section(s): 7,8 &13
- 

## **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Do not eat, drink or smoke when using this product.
- Take precautionary measures against static discharges
- Use explosion-proof equipment.
- Use non-sparking tools.
- Use only in well ventilated areas
- Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines
- In case of inadequate ventilation wear respiratory protection.

### 7.2 Conditions for safe storage, including any incompatibilities

- Keep only in the original container
- Keep container tightly closed, in a cool, well ventilated place
- Opened containers should be carefully resealed and stored in an upright position
- Ground and bond container and receiving equipment.
- Keep away from heat and sources of ignition
- Incompatible with strong acids
- Incompatible with oxidizing substances

### 7.3 Specific end use(s)

- Solvent
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## **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

BMGV (Biological Monitoring Guidance Value) (UK) 650 mmol methyl hippuric acid/mol creatine in urine Sampling Time: post shift

**SECTION 8: Exposure controls/personal protection (....)**

(EU) OELV (long term TWA) 50 ppm 221 mg/m<sup>3</sup>  
 (EU) OELV (short term limit value) 100 ppm 442 mg/m<sup>3</sup>  
 WEL (long term TWA) 50 ppm 220 mg/m<sup>3</sup> (UK)  
 WEL (short term limit value) 100 ppm 441 mg/m<sup>3</sup> (UK)  
 DNEL (inhalational) 221 mg/m<sup>3</sup> Industry, Long Term, Systemic Effects  
 DNEL (inhalational) 442 mg/m<sup>3</sup> Industry, Acute/Short Term, Systemic Effects  
 DNEL (inhalational) 221 mg/m<sup>3</sup> Industry, Long Term, Local Effects  
 DNEL (inhalational) 442 mg/m<sup>3</sup> Industry, Acute/Short Term, Local Effects  
 DNEL (dermal) 212 mg/kg (bw/day) Industry, Long Term, Systemic Effects  
 DNEL (inhalational) 65.3 mg/m<sup>3</sup> Consumer, Long Term, Systemic Effects  
 DNEL (inhalational) 260 mg/m<sup>3</sup> Consumer, Acute/Short Term, Systemic Effects  
 DNEL (inhalational) 65.3 mg/m<sup>3</sup> Consumer, Long Term, Local Effects  
 DNEL (inhalational) 260 mg/m<sup>3</sup> Consumer, Acute/Short Term, Local Effects  
 DNEL (dermal) 125 mg/kg (bw/day) Consumer, Long Term, Systemic Effects  
 DNEL (oral) 12.5 mg/kg (bw/day) Consumer, Long Term, Systemic Effects  
 PNEC aqua (freshwater) 327 ug/l  
 PNEC aqua (intermittent releases, freshwater) 327 ug/l  
 PNEC aqua (marine water) 327 ug/l  
 PNEC (STP) 6.58 mg/l  
 PNEC sediment (freshwater) 12.46 mg/kg  
 PNEC sediment (marine water) 12.46 mg/kg  
 PNEC terrestrial (soil) 2.31 mg/kg

**8.2 Exposure controls**

- Selection and use of personal protective equipment should be based on a risk assessment of exposure potential
- Engineering controls should be provided to prevent the need for ventilation
- Where a reusable half mask respirator is required, use EN 140, with gas/vapour filter EN 14387 type ABEK, or EN 405; EN 1827
- Where a full face mask respirator is required, use EN 136, with gas/vapour filter EN 14387 type ABEK
- Wear goggles giving complete eye protection
- Wear suitable protective clothing
- Wear anti-static boots
- Contaminated clothing should be laundered before reuse
- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- The selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Breakthrough time is dependent on the characteristics of the brand of glove used and the supplier should be consulted.
- Use good personal hygiene practices
- Do not eat, drink or smoke when using this product.
- Wash thoroughly after handling.
- Ensure eyewash stations and safety showers are nearby

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

- Appearance: Liquid; colourless
- Odour: Sweet-smelling; Aromatic odour
- Odour threshold: 1 ppm
- pH: Not applicable
- Melting point/freezing point: -94.96 - 13.25 °C @ 101.3 kPa
- Initial boiling point and boiling range: 136.16 - 144.5 °C @ 101.3 kPa

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**SECTION 9: Physical and chemical properties (....)**

- Flashpoint: 18 - 32 °C @ 101.3 kPa
- Evaporation Rate: No information available
- Flammability (solid,gas): May form explosive vapour/air mixtures
- Upper/lower flammability or explosive limits: Lower explosive limit: 1.1 % (in air); Upper explosive limit: 7 % (in air)
- Vapour Pressure: 8.21 hPa @ 20 °C
- Vapour Density: No information available
- Relative Density: 0.86 - 0.863 @ 25 °C
- Solubility(ies): 146 - 208 mg/L @ 25 °C and pH 7
- Partition Coefficient (n-Octanol/Water): Log Pow: 3.12 - 3.2 @ 20 °C and pH 7
- Autoignition Temperature: 432 - 528 °C @ 101.3 kPa
- Decomposition temperature: No information available
- Viscosity: (dynamic) 0.581 - 0.76 mPa s @ 20 °C
- Explosive Properties: May form explosive vapour/air mixtures
- Oxidising properties: Not applicable

## 9.2 Other information

- No information available
- 

**SECTION 10: Stability and reactivity**

## 10.1 Reactivity

- Reacts violently with strong oxidizing substances

## 10.2 Chemical stability

- Considered stable under normal conditions

## 10.3 Possibility of hazardous reactions

- May form explosive vapour/air mixtures

## 10.4 Conditions to avoid

- Keep away from heat and sources of ignition
- In confined spaces, sewers, etc., the vapours may collect to form explosive mixtures with air

## 10.5 Incompatible materials

- Incompatible with acids and alkalis
- Incompatible with oxidizing substances

## 10.6 Hazardous decomposition products

- Decomposition products may include carbon oxides
  - Decomposition products may include hydrocarbons
- 

**SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

- Acute Toxicity  
Harmful if swallowed or in contact with skin  
LD50 (oral, rat) 3 523 - 4 000 mg/kg bw  
LC50 (inhalation, rat) 6 350 - 6 700 ppm/4h  
LD50 (dermal, rabbit) 12 126 mg/kg bw
  - Skin corrosion/irritation  
Causes skin irritation.
  - Serious eye damage/irritation  
Causes serious eye irritation.
-

## **SECTION 11: Toxicological information (....)**

- Respiratory or skin sensitisation  
Based on available data, the classification criteria are not met
  - Germ cell mutagenicity  
No evidence of mutagenic effects
  - Carcinogenicity  
No evidence of carcinogenic effects
  - Reproductive toxicity  
No evidence of reproductive effects
  - Specific target organ toxicity (STOT) - single exposure  
STOT SE 3  
May cause respiratory irritation.
  - Specific target organ toxicity (STOT) - repeated exposure  
STOT RE 2  
May cause damage to organs through prolonged or repeated exposure.  
NOAEL (oral, rat): 150 - 250 mg/kg bw/day  
NOAEC (inhalation, rat): 3 515 mg/m<sup>3</sup>
  - Aspiration hazard  
May be fatal if swallowed and enters airways.
  - Contact with eyes  
Causes redness and irritation
  - Contact with skin  
May be harmful if absorbed through skin  
Causes redness and irritation  
Prolonged skin contact will result in defatting of the skin, leading to irritation, and in some cases, dermatitis
  - Ingestion  
Can cause damage to the central nervous system  
Can cause damage to the liver  
Can cause damage to the kidneys  
May be fatal if swallowed and enters airways.  
Causes nausea/vomiting
  - Inhalation  
Effect may vary from irritation of the nasal mucous membrane to severe lung irritation.  
Can cause damage to the central nervous system  
Causes dizziness, confusion, headache or stupor
- 

## **SECTION 12: Ecological information**

### 12.1 Toxicity

- Harmful to aquatic life with long lasting effects.
- LC50 (fish) 2.6 - 8.4 mg/l (4 days)
- EC50 (aquatic invertebrates) 1 mg/l (24 hr)
- EC50 (aquatic algae) 4.6 - 4.9 mg/l (72 hr)

### 12.2 Persistence and degradability

- Readily biodegradable

### 12.3 Bioaccumulative potential

- BCF 25.9

### 12.4 Mobility in soil

- No information available

## **SECTION 12: Ecological information (....)**

### 12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

### 12.6 Other adverse effects

- No information available
- 

## **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

- Disposal should be in accordance with local, state or national legislation
- Dispose of contents/container to an authorised waste collection point
- This material and its container must be disposed of as hazardous waste
- Do not reuse empty containers without commercial cleaning or reconditioning
- Do not pierce or burn container, even after use

### 13.2 Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)
- 

## **SECTION 14: Transport information**



### 14.1 UN number

- UN No.: 1307

### 14.2 UN proper shipping name

- Proper Shipping Name: XYLENES

### 14.3 Transport hazard class(es)

- Hazard Class: 3

### 14.4 Packing group

- Packing Group: III

### 14.5 Environmental hazards

- Not applicable

### 14.6 Special precautions for user

- No special precautions are required for this product

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

- Not applicable

### 14.8 Road/Rail (ADR/RID)

- Proper Shipping Name: XYLENES
- ADR UN No.: 1307
- ADR Hazard Class: 3
- ADR Packing Group: III
- Tunnel Code: D/E

### 14.9 Sea (IMDG)



## **SECTION 14: Transport information (....)**

- Proper Shipping Name: XYLENES
- IMDG UN No.: 1307
- IMDG Hazard Class: 3
- IMDG Pack Group.: III

### 14.10 Air (ICAO/IATA)

- Proper Shipping Name: XYLENES
  - ICAO UN No.: 1307
  - ICAO Hazard Class: 3
  - ICAO Packing Group: III
- 

## **SECTION 15: Regulatory information**

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

- This safety data sheet is provided in compliance with REACH Regulation (EC) No 1907/2006 as amended by Regulation (EU) 2015/830
- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe
- This product is covered by EU Directive 2012/18/EU (the Seveso III Directive)

### 15.2 Chemical safety assessment

- A REACH chemical safety assessment has not been carried out
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## **SECTION 16: Other information**

The above information is believed to be correct but does not purport to be all inclusive and shall only be used as a guide. The company will not be held liable for any damage resulting from handling or from contact with this product.

Sources of data: Information from published literature and internal company data

Text not given with phrase codes where they are used elsewhere in this safety data sheet:

- H226: Flammable liquid and vapour
- H304: May be fatal if swallowed and enters airways
- H312: Harmful in contact with skin.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H332: Harmful if inhaled
- H335: May cause respiratory irritation
- H373: May cause damage to organs through prolonged or repeated exposure
- H412: Harmful to aquatic life with long lasting effects

### Acronyms

- CAS: Chemical Abstracts Service
- DNEL: Derived No-Effect Level
- EC: European Community
- EC50: Effective Concentration, 50%
- GHS: Globally Harmonised System
- LC50: Lethal Concentration, 50%
- LD50: Lethal Dose, 50%
- NOAEL: No observed adverse effect level
- OEL: Occupational Exposure Limit
- PBT: Persistent, Bioaccumulative and Toxic

**SECTION 16: Other information (....)**

- PNEC: Predicted No-Effect Concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- STOT RE: Specific Target Organ Toxicity Repeated Exposure
- STOT SE: Specific Target Organ Toxicity Single Exposure
- vPvB: very Persistent and very Bioaccumulative
- WEL: Workplace Exposure Limit

--- end of safety datasheet ---

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