

# Safety data sheet

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according to 1907/2006/EC, Article 31

Printing date 01.04.2015 Version number 1 Revision: 01.04.2015

Trade name: **Stormsure Flexible Repair Adhesive**

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

- 1.1 Product identifier
  - Trade name: **Stormsure Flexible Repair Adhesive**
  - Article number: R045248-00
- 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:
    - Stormsure Ltd
    - Hall Farm
    - Lode Road
    - Bottisham
    - Cambridge
    - CB25 9DN
    - United Kingdom
    - Tel.: +44 3333 44 1500
  - Website: [www.stormsure.com](http://www.stormsure.com)
  - email: [info@stormsure.com](mailto:info@stormsure.com)

- 1.4 Emergency telephone number:
  - : In case of poisoning:  
GBK-EMTEL International  
Tel.(24h): +49(0)6132/84463 (all languages)
  - In case of transport accidents:  
Tel.(24h): (001) 352 323 3500 (Infotrac - Contract ID: 90373 / GBK)

## 2 Hazards identification

- 2.1 Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008
    - Flam. Liq. 2            H225 Highly flammable liquid and vapour.
    - Resp. Sens. 1        H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
    - Eye Irrit. 2            H319 Causes serious eye irritation.
    - STOT SE 3            H336 May cause drowsiness or dizziness.
  - Classification according to Directive 67/548/EEC or Directive 1999/45/EC
    - Xi; Irritant
    - R36:                    Irritating to eyes.
    - Xn;                     Sensitising
    - R42:                    May cause sensitisation by inhalation.
    - F;                        Highly flammable
    - R11:                    Highly flammable.
    - R67:                    Vapours may cause drowsiness and dizziness.

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### - 2.2 Label elements

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

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



- Hazard pictograms

GHS02

GHS07

GHS08

- Signal word Danger

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- Hazard-determining components of labelling:

diphenylmethane-4,4-diisocyanate

- Hazard statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H336 May cause drowsiness or dizziness.

- Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

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

P308+P313 IF exposed or concerned: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P403 Store in a well-ventilated place.

- Additional information:

Contains isocyanates. May produce an allergic reaction.

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- Risk phrases:

- 11 Highly flammable.
- 36 Irritating to eyes.
- 42 May cause sensitisation by inhalation.
- 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.
- 23 Do not breathe vapour/spray.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 29 Do not empty into drains.
- 33 Take precautionary measures against static discharges.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 51 Use only in well-ventilated areas.

- Special labelling of certain preparations:

Contains isocyanates. See information supplied by the manufacturer

- 2.3 Other hazards

In the event of a large-scale use of the product, ignition sources in the immediate proximity and in low-lying areas, such as welding equipment, bells, heating elements, refrigerators, storage heaters etc. should be switched off! Erect warning signs warning of the hazardous risk of explosive atmosphere!

- Results of PBT and vPvB assessment

- PBT: Not applicable.
- vPvB: Not applicable.

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## 3 Composition/information on ingredients

- 3.2 Chemical characterization: Mixtures
- Description: Mixture of several substances
- Dangerous components:
  
- SVHC Doesn't contain SVHC-substances
- 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; consult doctor in case of complaints.  
In case of unconsciousness bring patient into a stable side position for transport.
- After skin contact

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CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.: 01-2119475103-46-xxxx	ethyl acetate Xi R36; F R11 R66-67 Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	20-30%
CAS: 101-68-8 EINECS: 202-966-0 Reg.nr.: 01-2119457014-47-xxxx	diphenylmethane-4,4'-diisocyanate Xn R20-40-48/20; Xn R42/43; Xi R36/37/38 Carc. Cat. 3 Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	<1.0%
CAS: 4083-64-1 EINECS: 223-810-8	p-toluenesulphonyl isocyanate Xi R36/37/38; Xn R42 R14 Resp. Sens. 1, H334; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	<0.2%

at affected skin with cotton wool or cellulose. Then wash and rinse thoroughly with water and a mild cleaning agent.- After eye contact Rinse opened eye for several minutes under running water. Then consult 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.

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## 5 Firefighting measures

- 5.1 Extinguishing media
  - Suitable extinguishing agents
  - Water spray
  - 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
  - Formation of toxic gases is possible during heating or in case of fire.
- 5.3 Advice for firefighters
  - Protective equipment: Wear self-contained respiratory protective device.

## 6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  - Ensure adequate ventilation
  - Use respiratory protective device against the effects of fumes/dust/aerosol.
  - Keep away from ignition sources
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up: Pick up mechanically.
- 6.4 Reference to other sections
  - 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.
- Information about protection against explosions and fires:
  - Fumes can combine with air to form an explosive mixture.
  - Protect against electrostatic charges.
  - Keep ignition sources away - Do not smoke.
- 7.2 Conditions for safe storage, including any incompatibilities
  - Storage
    - Requirements to be met by storerooms and receptacles: Prevent any seepage into the ground.
    - Information about storage in one common storage facility: Store away from foodstuffs.
  - Further information about storage conditions:
    - Protect from frost.
    - Keep receptacle tightly sealed. Protect from heat and direct sunlight.
    - Store receptacle in a well ventilated area.
    - Store in dry conditions. Avoid contact with water or water vapour.
- Storage class (according VCI-concept): 3
- 7.3 Specific end use(s) Waterproof Flexible Adhesive.

## 8 Exposure controls/personal protection

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

<b>Components with limit values that require monitoring at the workplace:</b>	
<b>141-78-6 ethyl acetate</b>	
WEL (Great Britain)	Short-term value: 400 ppm Long-term value: 200 ppm
<b>101-68-8 diphenylmethane-4,4'-diisocyanate</b>	
WEL (Great Britain)	Short-term value: 0.07 mg/m <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> Sen; as -NCO

- 8.1 Control parameters

- 8.2 Exposure controls

- Personal protective equipment

- General protective and hygienic measures

The usual precautionary measures should be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of the work.

Immediately remove all soiled and contaminated clothing

- Breathing equipment:

Not required with good ventilation and/or adequate extractor facilities

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.

Short term filter device: A2 (DIN EN 14387 / DIN EN 141)

- Protection of hands:

Protective gloves made of the following material:

Nitrile rubber, NBR (0,8mm)

The named material refers only to the chemical resistance to the product.

Another important factor in the selection of the right gloves is their resistance to mechanical wear and tear. This, however, can differ completely from company to company which is why we recommend that users contact glove manufacturers in order to establish compliance with their own individual operating needs. Attention is also to be paid to an adequate penetration time (> 240min / EN374) of the glove material which complies with the strength and duration of exposure to the product.

- Eye protection: Safety glasses

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### 9 Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- General Information
- Appearance:
  - Form: Pasty
  - Colour: Colourless
  - Odour: Characteristic
- Change in condition
  - Boiling point: 77 °C
  - Flash point: -4 °C
  - Ignition temperature: 460 °C
- Explosion limits:
  - Lower: 2.1 Vol %
  - Upper: 11.5 Vol %
- Vapour pressure at 20 °C: 97 hPa
- Specific gravity at 20 °C: 0.97 g/cm<sup>3</sup>
- Solubility in / Miscibility with
  - Water: Insoluble  
Reacts with water
  - Viscosity:
    - dynamic at 20 °C: 20000 mPas (Brookfield)
- Solvent content:
  - Organic solvents: 30.0 %
  - VOC (EU): 291.0 g/l
  - VOC (EU): 30.00 %
  - VOC (CH): 30.00 %
- 9.2 Other information No further relevant information available.
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### 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  
Reacts with alcohols, amines, aqueous acids and alkalis.  
Reacts with water forming carbon dioxide. In closed containers there is a danger of bursting, due to build up of pressure.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products:  
In case of fire, the following substance(s) may occur:  
Nitrogen oxides

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- Additional information: Open and release pressure carefully with pressurised containers.

### 11 Toxicological information

- 11.1 Information on toxicological effects
  - Acute toxicity:
  - Primary irritant effect:
    - on the skin: Prolonged or repeated contact with the skin may cause skin irritation
    - on the eye: irritant
  - Additional toxicological information: Vapours may cause drowsiness and dizziness.
  - Sensitisation May cause sensitisation by inhalation.
- 

### 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: Do not allow product 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.
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### 13 Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation Disposal in accordance with official regulations
  - EWC-Code(s):  
To be treated as industrial waste: do not dispose of in or on soil, in watercourses or bodies, or through a sewage system. These EU refuse code numbers are recommendations for waste accruing through the use of adhesives and sealants.



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Any waste produced from organic solvents or other dangerous substances listed under item 3 of this safety datasheet is itself classified as dangerous (\*).

Waste accruing during application:

080409\* waste adhesives and sealants containing organic solvents or other dangerous substances

080410 waste adhesives and sealants other than those mentioned in 080409

Waste accruing during cleaning:

08 04 11\* adhesive and sealant sludges containing organic solvents or other dangerous substances

08 04 12 adhesive and sealant sludges other than those mentioned in 080411

Soiled waste packaging

15 01 10\* packaging containing residues of or contaminated by dangerous substances.

Clean waste packaging:

15 01 01 paper and cardboard packaging

15 01 02 plastic packaging

15 01 04 metallic packaging

- Uncleaned packagings:

- Recommendation: Disposal must be made according to official regulations.

## 14 Transport information

- 14.1 UN-Number	
- ADR, IMDG, IATA	UN1133
- 14.2 UN proper shipping name	
- ADR	1133 ADHESIVES
- IMDG, IATA	ADHESIVES
- 14.3 Transport hazard class(es)	
- ADR, IMDG, IATA	
- Class	3 Flammable liquids.
- Label	3
- 14.4 Packing group	
- ADR	III
- 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:	Protect from moisture
- ADR	
- Limited quantities (LQ)	5L
- Transport category	3
- Tunnel restriction code	D/E
-	

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### IMDG

- Remarks: (Packing group III, if content of packaging ≤ 30l, according 2.3.2.3 IMDG)
- IATA
- Remarks: (Packing group III, if content of packaging ≤ 30l, according 3.3.3.1.1 IATA)
- UN "Model Regulation": UN1133, ADHESIVES, 3, III

## 15 Regulatory information

- 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.

-----  
- Legend of H- and R-phrases, concerning the in chapter 3 mentioned substances (marking of product please see chapter 2)

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

R11 Highly flammable.

R14 Reacts violently with water.

R20 Harmful by inhalation.

R36 Irritating to eyes.

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

R40 Limited evidence of a carcinogenic effect.

R42 May cause sensitisation by inhalation.

R42/43 May cause sensitisation by inhalation and skin contact.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

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- Department issuing MSDS:

- 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 Organization

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 Harmonized 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)

VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)

38.0.24

VOC: Volatile Organic Compounds (USA, EU)

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

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

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