

Safety Data Sheet

according to 1907/2006/EC, article 31

Printing date: 30/01/2018

Version number 3

Revision: 01/01/2018

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

1.1 Product identifier

Trade name: Stormsure Flexible Repair Adhesive

Article number: EP-TB1038

1.2 Relevant identified uses of the substance or mixture

Application of the substance/the mixture: Adhesive, Sealant

1.3 Details of the supplier of the safety data sheet

Manufacturer/supplier: Stormsure Ltd

Hall Farm, Lode Road

Bottisham

Cambridge

United Kingdom

+44 3333 4415 00

www.stormsure.com

Informing department: Product safety department.

1.4 Emergency telephone number

In case of poisoning: GBK-EMTEL International +49(0)6132/84463

In case of transport accidents: (001) 352 323 3500 (Infotrac - Contract ID: 90373 / GBK)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008:

Flammable Liquid 2	H225	Highly flammable liquid and vapour
Eye Irritant 2	H319	Causes serious eye irritation
Resp. Send. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
STOT SE 3	H336	May cause drowsiness or dizziness

Additional information: The classification resulted from the calculation method of CLP-regulation.

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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 GHS08

Signal word: Danger

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, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243	Take action to prevent static discharges.
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 so. 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: EUH204 contains isocyanates. May produce an allergic reaction.

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 and vPvB not applicable.

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SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of several substances

Dangerous components:

CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.:01-2119475103-46-xxxx	ethyl acetate 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 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%
CAS: 4083-64-1 EINECS: 223-810-8 Reg.nr.: 01-2119980050-47-xxxx	p-toluenesulphonyl isocyanate Resp. Sens. 1, H334; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	<0.1%

SVHC: Doesn't contain SVHC-substances.

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 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: Remove product by wiping or scraping it off, if necessary 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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SECTION 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 gasses is possible during heating or in case of fire.

5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use a respiratory protective device against the effects of fumes/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. Mix with sand or soil.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 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

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 against humidity. Protect from heat and direct sunlight. Store receptacle in a well ventilated area. Store in dry conditions. Storage class (according to German VCI-concept): 3

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Components with limit values that require monitoring at the workplace:

141-78-ethyl acetate	Short-term value	Long-term value
WEL (Great Britain)	400 ppm	200 ppm
IOELV (European Union)	1468 mg/m ³ , 400 ppm	734 mg/m ³ , 200 ppm
101-68-8 diphenylmethane-4,4'-diisocyanate (Sen; as -NCO)	Short-term value	Long-term value
WEL (Great Britain)	0.07 mg/m ³	0.02 mg/m ³
IOELV (European Union)	1468 mg/m ³ , 400 ppm	734 mg/m ³ , 200 ppm
4083-64-1 p-toluenesulphonyl isocyanate (Sen; as -NCO)	Short-term value	Long-term value
WEL (Great Britain)	0.07 mg/m ³	0.02 mg/m ³

DNELs:

141-78-6 ethyl acetate	Worker (long-term exposure/systemic)	Worker (long-term exposure/local)
Inhalative	734 mg/m ³	734 mg/m ³
101-68-8 diphenylmethane-4,4'-diisocyanate	Worker (long-term exposure/systemic)	Worker (long-term exposure/local)
Inhalative	0.05 mg/m ³	0.05 mg/m ³

Additional information: The homogenous mixing of this product is safeguarded by continual physical testing. Raw materials which formerly had dust-like properties are completely incorporated into the liquid / paste-like mass. Subsequently, possible TLVs for solid substances are not given, as there is no more danger of inhaling these substances (when dealing with this mixture)!

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8.2 Exposure controls

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: Direct contact with the chemical preparation must be avoided by organisational measures. Apply skin protectant before working with gloves to avoid skin swellings and use a skin cleansing and skincare product after the work. Compliance with the stated penetration time (starts with the first product contact) must be ensured! The gloves need to be disposed of after the penetration time and new gloves used!

For the permanent contact gloves made of following materials are suitable: If longer exposure to the chemical preparation is necessary, a sturdy over-glove against mechanical strain is recommended in combination with the "Barrier 02-100" under-glove from Ansell (penetration time 480 min).

For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable: Nitrile rubber (0.8 mm - penetration time 15 min)

As protection from splashes gloves made of the following materials are suitable:
Recommended for protection from splashes: disposable nitrile gloves (minimum thickness 0.12 mm) with long cuffs. After contact with the chemical preparation, take the disposable nitrile glove off immediately and put on a new disposable nitrile glove.

Eye protection: Safety glasses

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

General information

Form:	Pasty
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not determined

Change in condition

Initial boiling point and boiling range:	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 ³
Vapour density:	Not determined
Evaporation rate:	Not determined

Solubility in / miscibility with

Water: Insoluble.	Reacts with water.
Partition coefficient: n-octanol/water:	Not determined.

Viscosity

Dynamic at 20 °C:	20000 mPas (Brookfield)
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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.

SECTION 10: Stability and reactivity**10.1 Reactivity**

Curing reaction initiated by contact with water/humidity. Reacted product is inert.

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.

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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 substances may occur: Nitrogen oxides

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity: Based on available data the classification criteria are not met.

LD/LC50 values that are relevant for classification:

141-78-6 ethyl acetate	Oral Inhalative
LD50	4,935 mg/kg (rbt)
LC50/4 h	1,600 mg/l (rat)
141-78-6 ethyl acetate	Inhalative
LC50/4 h	11 mg/l (ATE)

Primary irritant effect: Prolonged or repeated contact with the skin may cause skin irritation.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitisation: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

CMR effects

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT single exposure: May cause drowsiness or dizziness.

Aspiration hazard: Based on available data, the classification criteria are not met.

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SECTION 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

Reacts with soil borne moisture to form an inert product.

Additional ecological information

Additional 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.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation: Disposal in accordance with official regulations.

EWC Codes: 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. Any waste produced from organic solvents or other dangerous substances listed under item 3 of this safety data sheet 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: 080411* adhesive and sealant sludges containing organic solvents or other dangerous substances 080412 adhesive and sealant sludges other than those mentioned in 080411.

Soiled waste packaging: 150110* packaging containing residues of or contaminated by dangerous substances.

Clean waste packaging: 150101 paper and cardboard packaging, 150102 plastic packaging, 150104 metallic packaging.

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SECTION 14: Transport information

14.1 UN-Number

ADR/RID/ADN, IMDG, IATA - UN1133

14.2 UN proper shipping name

ADR/RID/ADN - 1133 ADHESIVES
IMDG, IATA - ADHESIVES

14.3 Transport hazard class(es)



Class - 3 Flammable liquids
Label - 3

14.4 Packing group

ADR/RID/ADN, IMDG, IATA - II

14.5 Environmental hazards

Marine pollutant - No

14.6 Special precautions for user

Danger code (Kemler) - 33
EMS Number - F-E, S-D
Stowage Category - B

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

Not applicable.

Transport/Additional information:

Protect from moisture.

ADR/RID/ADN

Limited quantities (LQ) - 5L
Excepted quantities (EQ) - Code E2
Maximum net quantity per inner packaging - 30ml
Maximum net quantity per outer packaging - 500ml
Transport category - 2
Tunnel restriction code - D/E
Remarks - Packing group III, if content of packaging < 30L, according to 2.3.2.2 IMDG

IATA

Remarks - Packing group III, if content of packaging < 30L, according to 3.3.3.1.1 IATA

UN "Model Regulation"

UN 1133 ADHESIVES, 3, II

SECTION 15: Regulatory information

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

National regulations

Information about limitation of use

Employment restrictions concerning young persons must be observed.

Disturbance regulations

Critical quantity values according to the regulations on accidents should be adhered to.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 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.

For industrial use only

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

H225 Highly flammable

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

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

Department issuing SDS

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)

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VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds) VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 Resp. Sens. 1: Respiratory sensitisation – Category 1 Skin Sens. 1: Skin sensitisation – Category 1

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2