

### STORMSURE FLEXIBLE REPAIR ADHESIVE & SEALANT

### **General Outline of Product**

Stormsure is a single-component, elastic adhesive on the basis of polyurethane which reacts upon exposure to water vapour and cures to form a tough, highly flexible elastomer.

It provides excellent weather resistance, high adhesion strength to a variety of substrates including metals, glass, concrete, plastic composites, PVC, PU, Nylon, fibre glass, rubber, leather, wood, most fabrics and man-made materials without the need for primer pre-treatment.

### 1. Features.

Excellent chemical resistance.

Outstanding mechanical resistance against shear forces.

Excellent adhesion.

Excellent sealing.

Strong film-forming capabilities.

High Elongation.

Waterproof.

Excellent weathering properties.

Good gap filling capabilities.

Abrasion resistant.

Excellent chemical resistance.

Acceleration of the curing process possible.

Low shrinkage.

Excellent dispensing and application.

### 2. Applications

Repair leaks and holes in wetsuits and drysuits, waders, wellington and rubber boots, trainers and shoes, waterproof and foul weather clothing.

Patchless repairs on tents, ground sheets, waterproof clothing and inflatables.

Multi - purpose bonding and sealing to many substrates.

Bonding dust caps to surround and surround to basket on loudspeaker applications.

Bonding lead wires on loudspeaker applications.

Insulate electrical connections.

Electrical Potting & Encapsulation.

Repair of conveyor belts.

Horse Rug Repair.

# TECHNICAL DATA SHEET

# 3.1 General Properties

Properties	Result	Unit
Main Component	Polyurethane	
Colour	Clear , Black	
SOD-Viscosity at 25°C	25000	сР
Specific Gravity	0.995	
Tack Free Time	2 to 4 hours	hours
Full cure time	10 to 12 hours	hours
Tack free time with Accelerator	30	min

# 3.2 Properties after curing

Properties	Result	Unit
Shore hardness	90	A
Effective temperature range	-40 to 150	°C
Shelf life at 25°C		month
Tensile Strength	6500	psi
Dielectric Strength	400	Volts/mil
Elongation	300	%

# 3.3 180° Peel Strength pli

Item	Results
Glass	25
Wood	39
Cement	38
Aluminium	30
Steel	35
ABS	32
Polycarbonate	37
PVC	42
Acrylic	36
Urethane	40
Rubber	37
Thermoplastic Rubber	32
Neoprene	39

<sup>\*180°</sup> Peel Strength ASTM D903 Cured 7 days at 22°C

### TECHNICAL DATA SHEET

#### 3.4 Environmental Resistance

Stormsure exhibits excellent resistance to fresh and salt water, dilute acids and dilute bases. Thin films of Stormsure were immersed in the chemicals/solvents listed below for two weeks and exhibited weight gains of less than 2% and tensile strength loss

Chemical / Solvent	% Concentration	Chemical / Solvent	% Concentration
Acetic acid	5	Sodium carbonate	2.7
Acetic acid	10	Potassium hydroxide	3.4
Sulfuric acid	3	Ammonium hydroxide	3.4
Sulfuric acid	10	Boric acid	3.1
Nitric acid	10	Oxalic acid	3.1
Nitric acid	20	Motor oil, 30w	na
Lactic acid	3.8	Distilled water	na
Phosphoric acid	30	Hydraulic oil	na
Ammonium nitrate	50	Antifreeze	na

#### 4. General Information

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials. Not recommended on low energy surfaces like Polythene, Polypropylene. PTFE, Silicone and Hypalon.

For safe handling information on this product consult the Material Safety Data Sheet (MSDS).

#### 5. Instructions

Keep the original container tightly closed and store it in a dark, dry, sufficiently ventilated and cool place at a temperature of  $5 \sim 25$ °C. Part used tubes are often closed with a small amount of water vapour trapped inside. This will cause the remaining adhesive to cure. Squeeze glue to the end of the neck before putting the cap back on. Do not use the tube neck to spread the adhesive. The cap can become permanently fixed to the tube. Store part used tubes in the freezer to stop premature curirng. Warm to room temperature before reuse.

The hardening of the adhesive varies depending upon the thickness of the layer, the ambient temperature and the relative air humidity.

In order to obtain optimal results, remove grease, dirt and other impurities from the fitting surfaces. It cures as a clear solid, sometimes with small bubbles inside, but can turn a pale yellow when aged.

Once transferred into another container should not be returned to the original container. Excess product can be easily wiped off with a cloth.

### 6. Packing

Stormsure is available in collapsible aluminium tubes of 5ml, 15ml, 90ml, 285ml. (Special packing on request)

All data given here were compiled to the best of our knowledge and are based on experiments and tests. We cannot guarantee the results obtained through the use of our products, and all products are sold and samples given without any warranty, expressed or implied, of fitness for any particular purpose or otherwise and upon condition that the user shall make his own tests to determine the suitability of the product for his purpose.