According to Regulation (EU) No. 1907/2006 (REACH), Annex II

(COMMISSION REGULATION (EU) No 453/2010)

Version: 1.0/EN Revision date: 27/02/2012 Product name: PVC90 Printing date: 27/02/2012

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

1.1 Product identifier Trade name: PVC Glue

Chemical name: Vinyl Repair Glue

Product code: PVC90 REACH Pre-Registration

No.:

CAS# 78-93-3 05-2114280976-32-0000 CAS# 141-78-6 05-2114280960-45-0000 CAS# 67-64-1 05-2114280950-46-0000

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

Identified uses: To repair all kinds of inflatable boats, air bed, swimming pool, tents, toys, etc.

Uses advised against: Not available.

1.3 Details of the supplier of the SDS

Manufacturer: Stormsure Ltd

Address: Hall Farm Lode Road Bottisham Cambridge CB25 9DN UK

Contact person: Mr. Robert Altham E-mail: info@stormsure.com
Telephone: +443333441500

#### **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008[CLP]

Flammable Liquids, Category 2; H225 Eye Damage/Irritation, Category 2; H319

Specific Target Organ Toxicity - Single Exposure, Category 3; H336

Classification according to Directive 67/548/EEC[DSD] or Directive 1999/45/EC[DPD]

F: R11 - Xi: R36 - R66 - R67

Additional information

Full text of R-phrase(s)/H-statement(s): see SECTION 16.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008[CLP]

Hazard pictogram(s): Signal word: Danger

Hazard statement(s): H225: Highly flammable liquid and vapour.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

Precautionary statement(s):

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

P233: Keep container tightly closed.

P280:Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response: 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.

P370 + P378: In case of fire: Use dry chemical powder, carbon dioxide, or chemical foams for extinction.

Supplemental Hazard information (EUH):

EUH066: Repeated exposure may cause skin dryness or cracking. Special rules for supplemental label elements for certain mixtures:

No information available.

2.3 Other hazards

The mixture is used as adhesive to repair articles, but there is no particular risk for repairing articles during normal operating.

## **SECTION 3: Composition/information on ingredients**

3.1 Substance/Preparation information Description of the mixture: Mixture

Ingredients information:

Ingredient name CAS No. EC No. Classification under DSD Classification under CLP % (w/w)

Polyurethane resin 26680-22-8 Not listed. Not classified. Not classified. 15

Methyl Ethyl

Ketone; Butanone 78-93-3 201-159-0

F; R11 Xi; R36 R66

**R67** 

Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336

EUH066

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Ethyl Acetate 141-78-6 205-500-4

F; R11 Xi; R36 R66 **R67** 

Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066

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Acetone 67-64-1 200-662-2

F; R11 Xi; R36 R66 R67

Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336

EUH066

Full text of R-phrase(s) and H-statement(s): see SECTION 16.

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

4.1 Description of first aid measures

General notes:

In all cases of doubt, or when symptoms persist, seek medical attention.

Following inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid immediately.

Following skin contact:

Immediately wash skin with soap and plenty of water for at least 15 minutes while removing contaminated

clothing and shoes. Get medical aid if symptoms persist.

Following eye contact:

Remove contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally

lifting the upper and lower eyelids. Get medical aid immediately.

Following ingestion:

If swallowed, avoid prolonged, do not induce vomiting and call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Repeated exposure may cause skin dryness or cracking.

Vapors may cause eyes irritation. Vapors may cause drowsiness and dizziness.

4.3 Indication of the immediate medical attention and special treatment needed

Persons with pre-existing skin, eye, or respiratory disease may be at increased risk from the irritant or allergic properties of this material. Attending physician should treat exposed patients symptomatically. SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use dry chemical powder, carbon dioxide, or chemical foams.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

Will burn if involved in a fire. May produce toxic fumes of carbon monoxide if burning.

Vapors may form an explosive mixture with air. Vapors can travel to source of ignition and flash back.

5.3 Advice for fire-fighters

Wear self-contained breathing apparatus. Wear full protective suit. Prevent fire extinguishing water from contaminating surface water or the ground water system.

#### **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Keep unprotected persons away. Ensure adequate ventilation. Wear protective equipment, such as respirator, rubber gloves, goggles and protective clothing.

6.2 Environmental precautions

Do not allow material to be released to the environment without proper governmental permits.

6.3 Methods and material for containment and cleaning up

Sprinkle absorbent compound onto spill, then sweep into a plastic or metal container. Wipe up residue with

further paper towel and place in container. Wash spill area with soap and water. Steps to be taken in case

material is released or spilled: Absorb with dry sand or other inert material, then transfer to suitable container should follow all regulation or an authorized waste collector in your country. Dispose of contaminated material as waste according to Section 13.

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.

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

7.1 Precautions for safe handling

Avoid breathing vapors. Avoid getting in eyes, skin, or clothing. Use only in well-ventilated area. Keep containers tightly sealed, do not expose container to heat or flame. Dissipate static electricity during transfer

by grounding and bonding containers and equipments before transferring materials. Use working methods

according to operating instructions. Operating Temperature: 10°C -40°C.

7.2 Conditions for safe storage, including any incompatibilities

This product is flammable. Storage Temperature: Max 40 °C, Min 5 °C and indoor.

Keep away from sources of ignition, caustics and oxidizers, heat, spark and flame. -- No smoking.

Store in cool, dry conditions in well sealed containers. Keep away from children.

Store in a locked cabinet or with access restricted to technical experts or their assistants.

Package: 1.5g、3g、5g、6g、7g、10g、12g、15g、30g、60g、120g in alumimun tube and sealed.

7.3 Specific end use(s)

Apart from the uses mentioned in SECTION 1.2 no other specific uses are stipulated.

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

8.1 Control parameters

Exposure limit values:

CAS# 78-93-3 MAC (NL): 200 ppm; 590 mg/m3.

MAK (DE): 200 ppm; 590 mg/m3. WEL (UK): 200 ppm; 590 mg/m3.

TWA (US OSHA): 200 ppm; 300 ppm (STEL).

TWA (ACGIH): 200 ppm; 300 ppm (STEL).

CAS# 67-64-1 MAC (Japan): 200 ppm; 470 mg/m3.

MAC (NL): 750 ppm; 1780 mg/m3. MAK (DE): 1000 ppm; 2400 mg/m3.

TWA (US OSHA): 750 ppm; 1000 ppm (STEL). TWA (ACGIH): 750 ppm; 1000 ppm (STEL). CAS# 141-78-6 MAC (NL): 550 mg/m<sub>3</sub>. WEL (DE): 400 ppm; 1400 mg/m<sub>3</sub>.

TWA (UK): 200 ppm; 400 ppm (STEL).

TWA (US OSHA): 400 ppm. TWA (ACGIH): 400 ppm.

DNEL (Derived No Effect Level) for workers and the general population:

Not available.

PNEC (Predicted No Effect Concentration) values:

Not available.

8.2 Exposure controls

Appropriate engineering controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below exposure

The usual precautionary measures should be adhered to in handling the chemicals. Instantly remove any

soiled and impregnated garments. Avoid contact with skin and eyes and the inhalation of vapor.

Personal protective equipment:

Eye protection: Wear appropriate protective eyeglasses or chemical safety goggles.

Hand protection: Wear appropriate protective gloves to prevent hand exposure.

Wash hands before breaks and at end of work

Skin protection: Wear appropriate protective clothing to prevent skin contact.

Change contaminated or soaked clothing.

Respiratory protection: Use breathing protection with high concentrations.

Environmental exposure controls:

Avoid entering into surface water or sanitary sewer system.

#### **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

Appearance: Viscous Liquid Colour: Semi-Transparent. Odour: Ketone odor. pH: Not available.

Melting point: Not available. Boiling point: 56 ~ 80 °C Flash point: 0°C, close cup

Ignition temperature: Not available. Vapour pressure: 77.5 mm/Hg at 20°C Specific Gravity: 0.81~ 0.87 (H2O=1) Water solubility: Partial soluble, at 20°C

Evaporation Rate: 5.72 (Eac=1)

Vapor Density: Heavier than air (Air=1). n-Octanol/Water (log Po/w): Not available.

Viscosity: Aprox.2200 cps. at 25°C Explosion limits: 1.8% - 13.0%

9.2 Other information No data available.

#### **SECTION 10: Stability and reactivity**

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Temperatures over 40°C, flame, ignition sources, and incompatible materials.

10.5 Incompatible materials

Oxidizers, caustics substances and ignition materials.

10.6 Hazardous decomposition products

Will burn if involved in a fire. May produce toxic fumes of carbon monoxide if burning.

### **SECTION 11: Toxicological information**

11.1 Information on toxicological effects

Acute toxicity:

LD<sub>50</sub> (Oral, rat) LC<sub>50</sub> (Inhalation, rat) LD<sub>50</sub> (Dermal, rabbit)

CAS# 78-93-3 2737 mg/kg 23500 mg/m<sub>3</sub>/8h 6400~8000 mg/kg

CAS# 67-64-1 5800 mg/kg 50100 mg/m<sub>3</sub>/8h 20000 mg/kg

CAS# 141-78-6 5620 mg/kg 45000 mg/m $_3$ /2h > 18000 mg/kg

Skin corrosion/irritation:

CAS# 78-93-3 CAS# 67-64-1 CAS# 141-78-6

Skin, rabbit: Moderately irritating Slightly irritating Not irritating

Serious eve damage/irritation:

CAS# 78-93-3 CAS# 67-64-1 CAS# 141-78-6

Eye, rabbit: Highly irritating Moderately irritating Not irritating

Respiratory or skin sensitization:

May cause allergic reaction in some individuals.

Germ cell mutagenicity:

No information available.

Carcinogenicity:

No information available.

Reproductive toxicity:

No information available.

STOT-single exposure:

May cause drowsiness or dizziness.

STOT-repeated exposure:

No information available.

Aspiration hazard:

No information available.

### **SECTION 12: Ecological information**

12.1 Toxicity

Quantitative data on the acute fish/daphnia/bacteria toxicity of this product are not available.

12.2 Persistence and degradability

When release to soil or water, this material may biodegrade to a moderate extent.

When release into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals.

12.3 Bioaccumulative potential

This material is not significantly bio-accumulate.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment information is not available as chemical safety assessment not conducted.

12.6 Other adverse effects

Avoid runoff into storms and sewers which lead into waterways.

Do not flush into surface water or sanitary sewer system.

### **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

Dispose of in accordance with all local, provincial, state, and federal regulations.

Hand over to disposers of hazardous waste.

Must be specially treated under adherence to official regulations.

Empty container: May contain explosive vapors. Do not cut, puncture or weld on or nearby.

### **SECTION 14: Transport information**

14.1 Land transport (ADR/RID)

Proper Shipping Name: ADHESIVES, containing flammable liquid.

Class: 3 UN-No.: 1133 Packing group: II Hazard label: 3

14.2 Sea transport (IMDG)

Proper Shipping Name: ADHESIVES, containing flammable liquid.

Class: 3 UN-No.: 1133 Packing group: II Marine pollutant: No

14.3 Air transport (IATA/IACO)

Proper Shipping Name: ADHESIVES, containing flammable liquid.

Class: 3 UN-No.: 1133 Packing group: II

14.4 Additional information

Keep away from foodstuffs, acids and alkalis. Put between 5 °C and 40 °C.

The data provided in this section is for information only and may not be specific to your package size. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

Shipping information for containers less than 1 litter.

DOT Shipping Name: Consumer Commodity; DOT Hazard Class: ORM-D immersion risks.

Label for transport:

### **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulation:

Authorisations: No information available. Restrictions on use: No information available.

EINECS: CAS #78-93-3, CAS #67-64-1, and CAS #141-78-6 are listed in the Inventory.

DSD (67/548/EEC): CAS #78-93-3, CAS #67-64-1, and CAS #141-78-6 are listed in the Inventory.

Other chemical regulation:

CAS No. USA TSCA Canada DSL Australia AICS Korea ECL

Japan ENCS

China IECSC

78-93-3 Listed Listed Listed Listed Listed Listed 67-64-1 Listed Listed

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this product.

#### **SECTION 16: Other information**

16.1 Revision Information

Date of the previous revision: Not applicable. Date of this revision: 27/02/2012

Revision summary: The first new SDS 16.2 Abbreviations and acronyms

CLP: EU regulation (EC) No 1272/2008 on classification, labelling and packaging of chemical

substances and mixtures.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

EINECS: European Inventory of Existing Commercial Chemical Substances.

DSD: Dangerous Substance Directive (67/548/EEC).

TSCA: Toxic Substances Control Act, The American chemical inventory.

DSL: Domestic Substances List, The Canadian chemical inventory.

AICS: The Australian Inventory of Chemical Substances.

ECL: Existing Chemicals List, the Korean chemical inventory.

ENCS: Japanese Existing and New Chemical Substances.

IECSC: Inventory of existing chemical substances in China.

16.3 Key literature references and sources for data

Provided by company.

16.4 Relevant R-phrases/H-statements

R11: Highly flammable.

R36: Irritating to eyes.

R66: Repeated exposure may cause skin dryness or cracking.

R67: Vapours may cause drowsiness and dizziness.

16.5 Training advice

Provide adequate information, instruction and training for operators.

16.6 Declare to reader

The information in this SDS is provided all the relevant data fully and truly. However, the information is provided without any warranty on their absolute extensiveness and accuracy. This SDS was prepared to

provide safety preventive measures for the users who have got professional training. The personal user who obtained this SDS should make independent judgment for the applicability of this SDS under special

conditions. In these special cases, we do not assume responsibility for the damage. According to REACH

Article 31(5), the SDS shall be supplied in an official language of the Member State(s) where the substance

or mixture is placed on the market, unless the recipient Member State(s) concerned provide otherwise. It

should also be noted that this SDS is applicable to the countries with English as an official language.

------ End of the SDS ------