

Safety Data Sheet

SECTION 1: IDENTIFICATION

Product name: Smart Patch
Product Number: 8843, 8846, 8855, 8862, 8870, 8899, 23996, 23997, 23998
Product Use: GRP Protection/ Repair System
Distributor : Tifco Industries, Inc.
Address: P.O. Box 40277
Houston, TX 77240
Telephone number: 281-571-6000
Chemtel: 1-800-255-3924

SECTION 2: HAZARDS IDENTIFICATION

As per Globally Harmonized System of Classification and Labelling of Chemicals.

HEALTH HAZARDS:

Eye Irritation:	Category 2B
Respiratory Sensitization:	Category 2B
Skin Sensitization:	Category 1B

SIGNAL WORD:

Danger



HAZARD STATEMENTS:

- Harmful if swallowed.
- Causes eye irritation.
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- May cause an allergic skin reaction.

PRECAUTIONARY STATEMENTS:

Prevention

Wash hands thoroughly after handling.
Avoid breathing dust or vapors.
Contaminated work clothing must not be allowed out of the work place.
Wear protective gloves.

Response:

If swallowed: Call a Poison Center/Doctor if you feel unwell.

If in your eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If irritation persists: Get medical Advice/Attention.

If on skin: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical Advice/Attention.

Wash contaminated clothing before reuse.

STORAGE:

See Section 7

DISPOSAL:

Dispose of contents/container in accordance with Local/Regional/Regulations.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name: Fiberglass
Ingredient Percentage: 20 – 25%
ACGIH TLV TWA: N/A

Ingredient Name: Mineral Fillers
Ingredient Percentage: 45 – 50%
ACGIH TLV TWA: N/A

Ingredient Name: Polyester Resin
Ingredient Percentage: 18 – 23%
ACGIH TLV TWA: N/A

Ingredient Name: Styrene Monomer
Ingredient Percentage: 0.6% by weight
CAS: 100425

OSHA PEL TWA: 100 ppm

SECTION 4: FIRST AID MEASURES

General Advice: Avoid contact with skin and eyes.

Skin: Wash off immediately with soap and plenty of water.

Eye Contact: Flush with plenty of water. Consult a physician. Show this Safety Data Sheet to the doctor in attendance.

Inhalation: Remove to fresh air.

SECTION 5: FIRE – FIGHTING MEASURES

Flammable Limits in Air, (% by volume): LEL 6.6% UEL 0.9% (Styrene)
Flash Point: 840 deg F
Autoignition Temp: N/A
Extinguishing Media: H2O, CO2, or dry chemical.

Fire Fighting Instructions:

Recommended protective clothing, full face self contained MSHA/NIOSH approved breathing apparatus.

Unusual Fire and Explosive

Hazards:

None

SECTION 6: ACCIDENTAL RELEASE MEASURES**Personal Precautions:**

Avoid contact with skin and eyes

Environmental Precautions:

Do not let product enter drains

Methods For Cleaning Up:

Smart Patch is a flexible solid and cannot leak or spill. In case of accidental release, source of ignition should be removed and the product placed in containers such as covered steel drums to await disposal. Wear appropriate personal protective equipment.

SECTION 7: HANDLING AND STORAGE**Handling:**

Use only in well ventilated areas.
Keep away from heat and sources of ignition.
Follow general industrial hygiene practice.

Storage:

For maximum storage life and to maintain material workability, store below 72 Deg F (22deg C). Material is packaged in special bags impermeable to styrene. Do not puncture bag. Re seal after partial use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering Controls:**

Engineering controls are not necessary if good hygiene practices are followed. Before eating, drinking or smoking wash face and hands thoroughly with soap and water. Avoid unnecessary skin contact. Impervious gloves and apron are recommended to prevent skin contact. For operations where eye or face contact can occur, wear eye protection such as chemical or splash proof goggles or face shield. Where exposures are below the permissible exposure limit (PEL), no respiratory protection is required. Where exposures exceed the PEL, use respirator approved by NIOSH for the material and level of exposure. See "Guide to Industrial Respiratory Protection" (NIOSH). Cutting, grinding or sanding of parts fabricated after curing of this material may create respirable dust particles. Respiratory protection appropriate for this dust may be required. Refer to the regulated component section for potential hazardous components in dust. Gloves, long sleeved shirt

and safety glasses are recommended to prevent contact with any dust particles generated.

Ventilation requirements:

N/A if TLV/PEL not exceeded. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen – deficient environment.

Ensure that dust handling systems such as exhaust ducts, dust collectors, vessels and processing equipment are designed in a manner to prevent the escape of dust into the work area.

Use only appropriately classified electrical equipment and powered industrial trucks.

Personal Protective Equipment:

Eye / face protection:

Safety glasses / goggles to protect against dry particles.

Skin protection:

Impervious and abrasion resistant.

Respiratory protection:

None if TLV / PEL not exceeded.

Other protective clothing or Equipment:

None – recommend using good industrial hygiene.

Work hygienic practices:

None. Recommend using good industrial hygiene practices.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	A soft, tacky material of various colours
Odour:	Sweet
Odour Threshold:	Low
pH:	N/A
Melting point:	N/A
Boiling point/freezing point:	N/A
Flash Point:	840 deg f
Evaporation rate:	0.00
Flammability:	Self-extinguishing. Does not hold a flame
Upper / lower flammability or Explosive limits:	N/A
Vapour pressure:	4.5 (styrene)
Vapour density:	3.6(styrene)
Relative density:	N/A
Solubility in water:	Not soluble in water
Partition coefficient: n-octanol/ Water:	N/A
Auto-ignition temperature:	N/A

Decomposition temperature: N/A
Viscosity: Solid state

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under normal conditions

Conditions to Avoid: High temperatures, direct UV light.

Incompatibility: Oxidizing agents

Hazardous decomposition products: Carbon dioxides

Hazardous polymerization: Not likely under normal conditions

Polymerization conditions

Conditions to to avoid: High temperatures and direct UV light in uncured state.

SECTION 11: TOXICOLOGICAL INFORMATION

General toxicological info: Hazard Identification. Toxicological Information on the OSHA Regulated Components of this product are as follows:

Styrene has an acute oral LD50 (RAT) of 5 g/kg. The inhalation LC50 (RAT) is 24 mg/l following a 4-hour exposure. Acute overexposure to styrene vapour may cause moderate eye and nasal irritation as well as drowsiness, headache and central nervous system depression. Styrene is a moderate skin and eye irritant. Styrene has been shown to cause lung tumors in mice. Epidemiological studies of styrene exposure in humans is not conclusive due to the inadequate control of variables.

Acute oral (RAT) and dermal (RABBIT) LD (50) values are estimated to greater than 5,000 mg/kg and greater than 2,000 mg/kg, respectively. The 4-hour inhalation LC 50 (RAT) value is estimated to be greater than 20 mg/l. Direct contact with this material may cause minimal eye and skin irritation. Inhalation overexposure may cause irritation of the respiratory tract and eyes. Refer to section 11 for Toxicology information on the sha Regulated Components of this product. Inhalation overexposure to Zinc Stearate, Alumina Trihydrate, Kaolin, Calcium Metasilicate, Glass, Mica, Fiberglass, Cellulose, Iron Oxide, Carbon Black, and Talc may cause respiratory congestion and irritation.

SECTION 12: ECOLOGICAL INFORMATION

No Applicable Information was found.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposable considerations: Cure waste material by exposing to UV light (sunlight or artificial) and dispose of as non-hazardous solid waste as per local regulations.

SECTION 14: TRANSPORT INFORMATION

UN number:	Not applicable
Packaging Group:	Not applicable
ADR/RID:	Not applicable
ICAO/IATA:	Not applicable
IMDG Code:	Not applicable
Stow away from foodstuffs:	Yes
Marine Pollutant:	Non hazardous for transport

SECTION 15: REGULATORY INFORMATION

US Federal regulations: US TSCA: This product is manufactured in compliance with all provisions of the toxic substances Act, 15 U.S.C. 2601 ET.SEQ.

SECTION 16: OTHER INFORMATION

SDS last date of revision: **29th March 2015**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication.

Users of materials should familiarise themselves with storage, handling and application use to ensure all safety requirements are observed. No guarantee or warranty, express or implied. Is made with respect to this information and no liability is assumed as a result of its use.