SAFETY DATA SHEET: Sundog® RFID Staple

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Sundog® RFID staple having part numbers: SH/08-100 US, SH/08-100 EU.

Recommended Use: Tracking items with rough wood surfaces.

Restrictions on Use: Not approved for in vivo use

Not approved for food contact

Manufacturer: Utility Composites, Inc.

888 CR 108 Hutto, TX 78634

Emergency phone: 512-846-4027

2. HAZARDS IDENTIFICATION

Potential health effects: Installation of staples using manual hammer tacker or pneumatic tool causes the staples to exit the stapler with enough force to penetrate skin and can cause punctures, lacerations, bleeding and discomfort.

| 3. COMPOSITION/INFORMATION ON INGREDIENTS * | Weight %* | CAS# |
|---|-----------|----------------------|
| Synthetic Thermoplastics | > 45 | unknown |
| Cured Thermoset Resin | > 5 | unknown |
| Fiber Glass | < 40 | 65997-17-3 |
| Metals | <10 | 7429-90-5; 7440-50-8 |

*The thermoplastic, cured thermoset resin, metal type and exact percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Eye contact: In case of eye exposure to fumes due to the thermal decomposition of the product from burning, move personnel to fresh air. Rinse eye cautiously with water for several minutes, while eyelid being open. If eye irritation persists, seek medical attention/advice.

Protection: none required; however, use of eye protection is good practice.

Skin Contact: No significant irritation expected other than possible mechanical irritation. Wash off with soap and water. In case of injury, get immediate medical attention.

Protection: none required; however, use of protective gloves and full-sleeve clothing is good practice.

Inhalation: In case of inhalation of fumes due to the thermal decomposition of the product from burning, move personnel to fresh air. If problem persists, get immediate medical attention.

Ingestion: Not a likely route of exposure to this product but expected to be relatively non-toxic; if a large amount is swallowed, get medical attention.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water fog or spray, Foam, Powder, Carbon dioxide (CO_2) . Do not use water jet. Firefighting Instructions: Wear fire resistant personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel): Spilled material is a slipping hazard. Sweep any product from floor.

Accidental Release Disposal: Dispose of in accordance with all applicable federal, state and local regulations.

7. HANDLING AND STORAGE

Store at ambient temperatures. Keep containers closed to prevent contamination.

Keep away from open flames, hot surfaces, and source of ignition. Avoid dust formation.

Handle in accordance with good industrial hygiene and safety practice.

| 8. EXPOSURE CONTROLS/PERSONAL PROTECTION | | |
|--|--------------------------------------|--|
| Exposure limits: | | |
| Material | Exposure Limits | |
| Glass, Thermoplastic, | 5 mg/m3, TWA (ACGIH), inhalable dust | |
| Other chemicals | 1 fibers/cm3, TWA (ACGIH), fibers | |
| Cured Thermoset | | |
| PEL (OSHA) | 15 mg/m3 (total dust) | |
| | 5 mg/m3 (respirable) | |
| TLV (ACGIH) | 10 mg/m3 (inhalable) | |
| | 3 mg/m3 (respirable) | |
| Fiberglass | | |
| TLV (ACGIH) | 5 mg/m3 TWA, inhalable fraction | |

Wear safety glasses with side-shields and long-sleeved clothing when installing the staples. Handle in accordance with good industrial hygiene and safety practice. Proper safety procedures should be developed for each intended application.

When using this product, typical applications do not generate significant dust; however, if workers are facing dust concentrations above the exposure limit they must use appropriate certified respirators. Provide appropriate exhaust ventilation at places where dust is formed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid plastic staple with metal component

Odor: Odorless

Appearance: Black color > 200 °C (> 392 °F)

Vapor Pressure (mmHg): Negligible

Melting Point:

products:

Specific Gravity: >1
Water Solubility: Insoluble
% Volatiles: Negligible
Flash Point: Not applicable

10. STABILITY AND REACTIVITY

Stability: Stable at normal temperatures and storage conditions.

Reactivity: Not reactive under recommended conditions of handling storage and use.

Dangerous reactions: None identified

Hazardous decomposition Under fire conditions, staples may ignite and decompose to carbon monoxide,

ammonia, aldehydes, nitriles, nitrogen oxides. The release of other hazardous

decomposition products is possible.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: Exposure to fiber glass can affect respiratory tract.

Eye Effects: Non-irritating Skin Effects: Non-irritating

Carcinogenicity: Contains glass, oxide, chemicals (Group 2A and Group 2B: possible carcinogen to

humans (IARC) and confirmed carcinogen to animals with unknown relevance to

humans (ACGIH).

This product does not contain any ingredient designated as probable or suspected

human carcinogens by: NTP and OSHA

Other Effects: None

12. ECOLOGICAL INFORMATION

General: This material is not expected to be harmful to the environment.

Storage requirements: No special requirements

Spills & Leaks: N/A

13. DISPOSAL CONSIDERATIONS

Waste disposal: Disposal must be in accordance with applicable federal, state and local regulations. Determine waste classification at the time of disposal. Enclosed, controlled incineration is recommended unless directed otherwise by applicable ordinances. Not listed as RCRA Hazardous Waste (40 CFR 302).

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations. Not regulated in transportation by DOT, TDG, NOM and IMDG.

15. REGULATORY INFORMATION

US TSCA Inventory: Listed on Inventory

Other Inventory Compliance: Japan CSCL, AICS, KECI, DSL, PICCS, IECSC, REACH

US. EPA EPCRA SARA Title III: Section 302 (Extremely Hazardous Substance): None

Section 304 (Emergency Release Notification Reportable Quantity): None

Section 313 (Toxic Chemicals): None

California Proposition 65 WARNING! This product contains substances including glass which is/are

known in the State of California to cause cancer. For more information go

to www.P65Warnings.ca.gov.

16. OTHER INFORMATION

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ISSUE INFORMATION

By: Rajkiran R. Tiwari, PhD Utility Composites Inc.

The information in this SDS is offered to you in good faith as accurate at the time of issuance. The information represents our current data and best opinion as to the proper use in handling this material under normal conditions. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.