SAFETY DATA SHEET: S/05-37TR; SH/05-55TR

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Black Magic® composite staples including part numbers: S/05-37TR; SH/05-

Recommended Use: 55TR

Tire retreading

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 pneumatic staplers causes the staples to exit the stapler with enough force to penetrate skin and can cause punctures, lacerations, bleeding and discomfort.

Exposure to thermal decomposition products of this compound from burning may cause eye irritation with discomfort, tearing, or blurring of vision; or irritation of the upper respiratory passages, with coughing and discomfort.

3. COMPOSITION/INFORMATION ON INGREDIENTS	Weight %	CAS #	
Synthetic thermoplastic mixture	> 98	unknown	
Carbon Black	0.5-1.5	1333-86-4	
Styrene	<=1.0	100-42-5	
Acrylonitrile	< 0.1	107-13-1	

4. FIRST AID MEASURES

Eye contact: In case of eye exposure to fumes resulting from thermal decomposition of the product from burning, 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 lung exposure to fumes due to the thermal decomposition of the product resulting from burning, remove personnel to fresh air. If problem persist, get 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: Foam, Dry powder, Sand, Water Spray, Carbon dioxide (CO₂)

Unsuitable extinguishing media: Avoid heavy water stream

Fire hazard: Thermal decomposition can lead to the escape of carbon dioxide, carbon monoxide, gas/vapors, toxic.

Firefighting Instructions: Wear self-contained breathing apparatus and 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

Use only equipment designed to handle stapler.

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

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:

TWA (AGCIH) (Styrene) 85 mg/m³

Carbon Black:

PEL (OSHA) 3.5 mg/m3 TWA

Wear protective clothing and safety glasses with side-shields when installing the staples.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid black plastic staples

Odor: Slight or no odor Appearance: Black

Melting Point: No sharp melting, but softens gradually over a wide range of temperatures

Vapor Pressure (mmHg): Negligible

Specific Gravity: ~1

Water Solubility: Insoluble % Volatiles: Negligible Auto ignition Temp: 900 °F (366 °C)

10. STABILITY AND REACTIVITY

Stability: Stable at normal temperatures and storage conditions.

Materials to avoid: Strong acids and bases.

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

Dangerous reactions: None identified

Hazardous decomposition Under fire conditions, staples may ignite with intense heat and decompose to

products: fume, carbon monoxide and carbon dioxide. The release of other hazardous

decomposition products is possible.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: Not classified Eye Effects: Non-irritating

Inhalation: Inhalation of dust may cause irritation of the respiratory system.

Skin Effects: Non-irritating Other Effects: None

Carcinogenicity: Contains chemical (Group 2B: possibly carcinogen to humans (IARC) and

reasonably anticipated to be human carcinogen (NTP)).

This product contains chemical mentioned in OSHA carcinogen list.

Reproductive toxicity: Suspected of damaging fertility or the unborn child.

12. ECOLOGICAL INFORMATION

General: The product is not considered harmful to aquatic organisms nor to cause long-

term adverse effects in the environment.

Storage requirements: No special requirements

Persistence and Experience so far shows this product to be inert and not degradable.

degradability:

Bioaccumulative potential: No indication

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. Avoid release to the environment.

14. TRANSPORT INFORMATION

This material is in accordance with DOT.

15. REGULATORY INFORMATION

California Proposition 65: This product can expose you to chemicals including styrene which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

CANADA: All chemical substances in this product are listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL) inventory.

SARA Section 313 or Title III: Emission reporting (Styrene) 0.1-1%

16. OTHER INFORMATION

Issued: 10-23-2018

Supercedes: 01-11021-1, 01-4163-1, 01-05054-2

Document: TR 04155-1

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.

SAFETY DATA SHEET: SH/05-37TR

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Black Magic® composite staples including part numbers: SH/05-37TR

Recommended Use: Tire retreading

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 pneumatic staplers causes the staples to exit the stapler with enough force to penetrate skin and can cause punctures, lacerations, bleeding and discomfort.

Exposure to thermal decomposition products of this compound from burning may cause eye irritation with discomfort, tearing, or blurring of vision; or irritation of the upper respiratory passages, with coughing and discomfort.

3. COMPOSITION/INFORMATION ON INGREDIENTS	Weight %*	CAS#
Synthetic thermoplastic mixture	> 88	unknown
Carbon Black	0.5-1.5	1333-86-4
Styrene	<=1.0	100-42-5
Acrylonitrile	< 0.1	107-13-1
Fiber Glass	<10	65997-17-3

4. FIRST AID MEASURES

Eye contact: In case of eye exposure to fumes resulting from thermal decomposition of the product from burning, 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 lung exposure to fumes due to the thermal decomposition of the product resulting from burning, remove personnel to fresh air. If problem with breathing persist, get 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: Foam, Dry powder, Water Spray, Carbon dioxide (CO₂).

Unsuitable extinguishing media: Avoid heavy water stream.

Fire hazard: Thermal decomposition can lead to the escape of carbon dioxide, carbon monoxide, gas/vapors, toxic.

Firefighting Instructions: Wear self-contained breathing apparatus and 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Styrene Exposure limits
OSHA 420 mg/m³, TWA
ACGIH 85 mg/m³, TWA

Glass, oxide, chemicals

PEL (OSHA) 5 mg/m³, TWA, respirable dust

15 mg/m³, TWA, total dust

Wear safety glasses with side-shields and protective clothing when installing the staples.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid black plastic staples

Odor: Odorless Appearance: Black

Melting Point: No sharp melting, but softens gradually over a wide range of temperatures

Vapor Pressure (mmHg): Negligible

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

products:

Under fire conditions, staples may ignite and decompose to fume, carbon monoxide, carbon dioxide. The release of other hazardous decomposition

products is possible.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: Not classified
Eye Effects: Non-irritating
Skin Effects: Non-irritating

Other Effects: None

Carcinogenicity: Contains chemical (Group 2B: possibly carcinogen to humans (IARC) and 3-

reasonably anticipated to be human carcinogen).

This product contains chemical mentioned in OSHA carcinogen list.

Reproductive toxicity: Suspected of damaging fertility or the unborn child.

12. ECOLOGICAL INFORMATION

General: The product is not considered harmful to aquatic organisms or to cause long-term

adverse effects in the environment.

Storage requirements: No special requirements

Persistence and According to experiences this product is inert and not degradable.

degradability:

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. Avoid release to the environment.

14. TRANSPORT INFORMATION

This material is not regulated for transport in accordance with DOT.

15. REGULATORY INFORMATION

California Proposition 65: This product contains, or may contain, trace quantities of a substances including ethylbenzene which are known to the state of California to cause cancer, developmental and/or reproductive harm

CANADA: All chemical substances in this product are listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL) inventory.

SARA Section 313 or Title III: Emission reporting (Styrene) 0.1-1%

16. OTHER INFORMATION

Issued: 10-23-2018

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Document: TR-LM 04155-1

ISSUE INFORMATION

By: Pamela S. Tucker, PhD Utility Composites Inc.

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