

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:..... WEST SYSTEM® 713 Episize™ Unidirectional Glass Tape, WEST SYSTEM 729 Episize™ Glass Tape, WEST SYSTEM 731 Episize™ Glass Tape, WEST SYSTEM 732 Episize™ Glass Tape and WEST SYSTEM 733 Episize™ Glass Tape.
APPLICABLE PRODUCT CODES: 713-50, 729, 729-10, 731, 732, 732-10 and 733
CHEMICAL FAMILY:..... Woven, non-respirable, continuous filament glass fiber.
INTENDED PRODUCT USES:..... Composites.
PRODUCT RESTRICTIONS: None identified.
SDS VERSION: 713, 729, 731, 732 and 733-2019a

2. HAZARDS IDENTIFICATION

Classification of Substance or Mixture

Hazards Not Otherwise Classified (HNOC)

Label Elements

Hazard Pictogram(s):
No data available

Signal Word:
WARNING

Hazard Statements:
No data available

Precautionary Statements:
No data available

Other Hazards:

As supplied, the glass fibers in this product are non-respirable. Continuous filament glass fibers that are chopped, crushed, sanded or otherwise mechanically processed may contain very small amounts of respirable particulate, some of which may be in the form of glass shards. Glass fragments or shards may cause temporary mechanical eye, skin and respiratory irritation and itching.

3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

| INGREDIENT NAME | CAS # | CONCENTRATION (%) |
|--|--------------|-------------------|
| Continuous filament, non-respirable, glass fiber | 65997-17-3 | 80-100 |
| Sizing | Trade Secret | 1-5 |

The exact chemical identity and/or exact percentage (concentration) of each ingredient may be held as confidential business information (CBI). Any ingredient not disclosed in this section may have been determined not to be hazardous to health or the environment, or it may be present at a level below its disclosure threshold.

4. FIRST AID MEASURES

FIRST AID FOR EYES..... SYMPTOMS: May cause mechanical irritation and redness. RESPONSE: Flush immediately with water for at least 15 minutes. Remove contact lenses if present and easy to do. Consult a physician as precautionary measure if irritation persists.

FIRST AID FOR SKIN..... SYMPTOMS: Skin contact with glass shards may cause temporary mechanical irritation. RESPONSE: Remove contaminated clothing. Wash, lather skin with soap and rinse with warm, flowing water.

FIRST AID FOR INHALATION..... SYMPTOMS: Irritation and cough. RESPONSE: Remove to fresh air if respiratory irritation occurs. Consult a physician if irritation or cough develops and persists.

FIRST AID FOR INGESTION..... SYMPTOMS: Not a likely route of exposure. No acute adverse health effects expected from amounts ingested under normal conditions of use. RESPONSE: Seek medical attention if a significant amount is ingested.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: **SUITABLE:** Foam, carbon dioxide (CO₂), water, dry chemical. **NON-SUITABLE:** None known.

FIRE AND EXPLOSION HAZARDS: Fiberglass itself will not support combustion. Sizing and stitching may be combustible. During a fire, smoke may contain carbon monoxide, carbon dioxide, hydrogen, and small amounts of other combustion products of undetermined composition and toxicity.

SPECIAL FIRE FIGHTING PROCEDURES: Wear a self-contained breathing apparatus and complete full-body personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES: Keep unnecessary and unprotected personnel from entering area. Use appropriate safety and personal protective equipment as indicated in Section 8.

MITIGATION AND CLEAN UP PROCEDURES: Minimize or shut off air movement. Material will settle out of the air. Sweep or vacuum in a manner as to avoid generating additional airborne dust.

ENVIRONMENTAL PRECAUTIONS: No data available. Not generally regarded as hazardous to the environment. Prevent from entering into soil, ditches, sewers, waterways and groundwater. See Section 12 for environmental impact information.

7. HANDLING AND STORAGE

STORAGE TEMPERATURE (min./max.): Store at or below 25°C (77°F)

STORAGE: Store in cool, dry place. Store in original packaging to avoid dust generation. Store in environment with less than 65% relative humidity for best performance.

HANDLING PRECAUTIONS: As supplied, the glass fibers in this product are non-respirable. Continuous filament glass fibers that are chopped, crushed, sanded or otherwise mechanically processed may contain very small amounts of respirable particulate, some of which may be in the form of glass shards. Avoid generating excessive airborne dust. Avoid skin and eye contact. Wash thoroughly after handling. Launder contaminated clothing before reuse. Avoid excessive inhalation of airborne dusts.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use with adequate general ventilation and/or local ventilation to keep exposures below established limits.

EYE PROTECTION GUIDELINES: Safety glasses with side shields or chemical splash goggles.

SKIN PROTECTION GUIDELINES: Wear protective gloves and protect other exposed skin areas. Consider wearing a light-weight, full body-covering protective clothing that can be discarded upon contamination with glass fibers or glass shards.

RESPIRATORY PROTECTION GUIDELINES: As supplied, the glass fibers in this product are non-respirable. Continuous filament glass fibers that are chopped, crushed, sanded or otherwise mechanically processed may contain very small amounts of respirable particulate, some of which may be in the form of glass shards. When ventilation cannot be made adequate enough to keep exposures below established limits, use a NIOSH approved respirator with N95 or P100 particulate filter efficiency or better, depending on specific workplace conditions. Consult with your respirator supplier to ensure proper selection of respirator and cartridge based on ingredients listed in Section 3 and specific workplace conditions. Use and select a respirator according the guidelines established in OSHA 1910.134 or other applicable respiratory protection standard.

ADDITIONAL PROTECTIVE MEASURES: Practice good caution and personal cleanliness to avoid inhalation and skin and eye contact. Wash exposed skin areas thoroughly after handling.

OCCUPATIONAL EXPOSURE LIMITS: Exposure limits may not be established for this product as a whole. For established exposure limits of specific ingredients in this product, or other available exposure limit information, refer to the table below.

| Ingredient Name | CAS# | Exposure Limit Information |
|--|--------------|---|
| Continuous filament, non-respirable, glass fiber | 65997-17-3 | ACGIH – TLV TWA: 1 f/cc; 10 mg/m ³ (total); 3 mg/m ³ (respirable) OSHA – PEL TWA: 15 mg/m ³ (total); 5 mg/m ³ (respirable) |
| Sizing | Trade Secret | No data available. |

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Woven glass fabric; solid.

COLOR: White to off-white.

ODOR: No odor.

ODOR THRESHOLD: No data available.

pH: No data available.

MELTING POINT / FREEZING POINT No data available.
 BOILING POINT (760mm/Hg): No data available.
 FLASH POINT: No data available.
 AUTO IGNITION TEMPERATURE No data available.
 LOWER EXPLOSIVE LIMIT (LEL) No data available.
 UPPER EXPLOSIVE LIMIT (UEL) No data available.
 VAPOR PRESSURE No data available.
 SPECIFIC GRAVITY/DENSITY (water = 1) No data available.
 BULK DENSITY No data available.
 VAPOR DENSITY (air = 1) No data available.
 EVAPORATION RATE (Butyl Acetate = 1) No data available.
 WATER SOLUBILITY (% BY WT.) No data available.
 PARTITION COEFFICIENT, n-OCTANOL/WATER (log Pow) No data available.
 KINEMATIC VISCOSITY: No data available.
 DECOMPOSITION TEMPERATURE: No data available.
 % VOLATILE BY WEIGHT: No data available.

10. STABILITY AND REACTIVITY

STABILITY: Product is stable at normal temperatures and pressures.
 REACTIVITY/HAZARDOUS REACTIONS: No data available.
 INCOMPATIBILITIES: No data available.
 CONDITIONS TO AVOID: Avoid excessive heat.
 DECOMPOSITION PRODUCTS: During a fire, smoke may contain carbon monoxide, carbon dioxide, and small amounts of other combustion products of undetermined composition and toxicity.

11. TOXICOLOGICAL AND HAZARD ENDPOINT INFORMATION

| Component Name | CAS# | LD ₅₀ Oral | LD ₅₀ Dermal | LC ₅₀ Inhalation |
|--|--------------|-----------------------|-------------------------|-----------------------------|
| Continuous filament, non-respirable, glass fiber | 65997-17-3 | No data available | No data available | No data available |
| Sizing | Trade Secret | No data available | No data available | No data available |

ACUTE TOXICITY: No specific toxicity data exists for this mixture. Classification is based on acute toxicity estimation methods using ingredient data.
 Oral: Not classified. Based on available data does not meet acute oral toxicity criteria.
 Dermal: Not classified. Based on available data does not meet acute dermal toxicity criteria.
 Inhalation: Not classified. Based on available data does not meet acute inhalation toxicity criteria.

SKIN CORROSION / IRRITATION: Not classified. Based on available data does not meet classification criteria.

SERIOUS EYE DAMAGE / IRRITATION: Not classified. Based on available data does not meet classification criteria.

RESPIRATORY SENSITIZATION: Not classified. Based on available data does not meet classification criteria.

SKIN SENSITIZATION: Not classified. Based on available data does not meet classification criteria.

REPRODUCTIVE TOXICITY: Not classified. Based on available data does not meet classification criteria.

MUTAGENICITY: Not classified. Based on available data does not meet classification criteria.

CARCINOGENICITY: Not classified. Based on available data does not meet classification criteria.

IARC Class 3 – Not classifiable as to its carcinogenicity to humans.

Animal Study: In 2000, the Institute of Occupational Medicine (IOM) in Scotland published the results of a long term inhalation study on animals exposed to fibers that were manufactured to be RESIRABLE. Animals were exposed to a very high concentration to these RESPIRABLE fibers (1022 fibers/cc for 5 hours/day, 7 days/week for 52 weeks). Exposure to these microfibers resulted in the development of fibrosis, lung cancer and mesothelioma as a result of the fibers being able to reach the lower regions of the lung.

Epidemiology Studies: Two major studies in the US (performed by the University of Pittsburgh) and Europe (performed by the International Agency for Research on Cancer) showed no increase in lung cancer or respiratory disease among people working in production facilities producing NON-RESPIRABLE continuous filament fiberglass. An additional smaller study performed in Canada also did not show an association between exposure of workers to fiberglass and respiratory cancer.

SPECIFIC TARGET ORGAN TOXICITY (Single Exposure): Not classified. Based on available data does not meet classification criteria.

SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure): Not classified. Based on available data does not meet classification criteria.

ASPIRATION HAZARD: Not classified. Based on available data does not meet classification criteria.

OTHER HEALTH HAZARD INFORMATION: As supplied, the glass fibers in this product are non-respirable. Continuous filament glass fibers that are chopped, crushed, sanded or otherwise mechanically processed may contain very small amounts of respirable particulate, some of which may be in the form of glass shards. The measured airborne concentration in areas where mechanical processing occurs has been shown to be extremely low and typically well below applicable exposure limits.

There are no known long term health effects from long term use or contact with non-respirable continuous filament fibers as supplied in this product. Non-respirable fibers cannot reach the deep lung because they have diameters greater 3.5 micrometers. Fibers of this dimension cannot penetrate the lower regions of the lung and thus having no possibility of serious pulmonary damage. Instead, they deposit on the surfaces of the upper respiratory tract, nose and pharynx. These fibers are then cleared through normal physiological mechanisms.

12. ECOLOGICAL INFORMATION

ACUTE AQUATIC TOXICITY: No specific test data available for the mixture. Calculated Estimate: Does not meet acute aquatic toxicity requirements based on available data.

CHRONIC AQUATIC TOXICITY: No specific test data available for the mixture. Calculated Estimate: Does not meet chronic aquatic toxicity requirements based on available data.

PERSISTENCE AND BIODEGRADABILITY: No specific test data available for the mixture.

MOBILITY IN SOIL: No specific test data available for the mixture.

ADDITIONAL ECOTOXICITY INFORMATION: Not expected to present an acute or chronic toxicity hazard to the aquatic environment. Prevent release to the environment, sewers and natural waters.

| Ingredient | CAS# | Ecotoxicity Classification Information |
|--|--------------|--|
| Continuous filament, non-respirable, glass fiber | 65997-17-3 | No data available |
| Sizing | Trade Secret | No data available |

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Evaluation of this product using RCRA criteria shows that it is not a hazardous waste, either by listing or characteristics, in its purchased form. It is the responsibility of the user to determine proper disposal methods.

Recycle, reclamation or landfilling may be preferred methods when conducted in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

US DOT

UN NUMBER: Not regulated.
 SHIPPING NAME: Not applicable.
 TECHNICAL SHIPPING NAME: Not applicable.
 HAZARD CLASS: Not applicable.
 PACKING GROUP: Not applicable.

CANADA TDG

UN NUMBER: Not regulated.
 SHIPPING NAME: Not applicable.
 TECHNICAL SHIPPING NAME: Not applicable.
 HAZARD CLASS: Not applicable.
 PACKING GROUP: Not applicable.

ICAO/IATA

UN NUMBER: Not regulated.
 SHIPPING NAME: Not applicable.
 TECHNICAL SHIPPING NAME: Not applicable.
 HAZARD CLASS: Not applicable.
 PACKING GROUP: Not applicable.
 MARINE POLLUTANT: Not applicable.

IMDG

UN NUMBER: Not regulated.
 SHIPPING NAME: Not applicable.
 TECHNICAL SHIPPING NAME: Not applicable.
 HAZARD CLASS: Not applicable.
 PACKING GROUP: Not applicable.

WEST SYSTEM® 713, 729, 731, 732 and 733 Fiberglass

EmS Number: Not applicable.
 MARINE POLLUTANT Not applicable.

15. REGULATORY INFORMATION

| COUNTRY | INVENTORY LIST | STATUS |
|---------------|------------------|--|
| United States | TSCA | All ingredients are listed or otherwise compliant. |
| Europe | EINECS or ELINCS | All ingredients are listed or otherwise compliant. |
| Canada | CEPA (DSL/NDL) | All ingredients are listed or otherwise compliant. |
| Australia | AICS | All ingredients are listed or otherwise compliant. |
| Japan | ENCS | All ingredients are listed or otherwise compliant. |
| South Korea | KECI | All ingredients are listed or otherwise compliant. |
| China | IECSC | All ingredients are listed or otherwise compliant. |
| Philippines | PICCS | All ingredients are listed or otherwise compliant. |
| New Zealand | NZIoC | All ingredients are listed or otherwise compliant. |

US EPA TSCA Requirements:..... No data available.

Canada WHMIS Confidential Business Information (CBI):..... No data available.

US EPA SARA TITLE III Reporting and Notification Requirements:

- Subject to Section 302 (TPQ) No data available.
- Subject to Section 304 (RQ)..... No data available.
- Subject to Section 311 or 312 Refer to the health and physical classifications in section 2.
- Subject to Section 313 No data available.

STATE REGULATORY INFORMATION:

Chemicals listed below may be specifically regulated by individual states. For details on state regulatory requirements you should contact the appropriate state agency.

COMPONENT NAME

/CAS NUMBER

No data available.

STATE CODE

16. OTHER INFORMATION

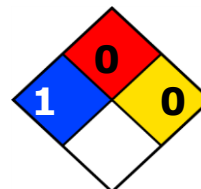
REASON FOR ISSUE:..... Updates to sections 3, 8, 11 7 15.
PREPARED BY: Gougeon Brothers, Inc.
TITLE: Health, Safety & Environmental Manager
APPROVAL DATE: January 15, 2019
SUPERSEDES DATE: June 1, 2015
SDS VERSION: 713, 729, 731, 732 and 733-2019a

OTHER HAZARD INFORMATION AND RATING SYSTEMS:

HMIS® RATING

| | |
|-----------------------------|----------|
| HEALTH: | 1 |
| FLAMMABILITY: | 0 |
| PHYSICAL HAZARD: | 0 |
| PERSONAL PROTECTION: | |

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:
 0 = Low or None; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe

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