

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:..... WEST SYSTEM® 403 Microfibers
PRODUCT CODE:..... 403, 403-9, 403-28, 403-B
CHEMICAL FAMILY:..... Cellulose flock and amorphouse silica mixture.
INTENDED PRODUCT USES:..... Thickening agent for liquid epoxy resins.
PRODUCT RESTRICTIONS:..... None identified.
SDS VERSION: 403-2016a

MANUFACTURER:
Gougeon Brothers, Inc.
100 Patterson Ave.
Bay City, MI 48706, U.S.A.
Phone: 866-937-8797 or 989-684-7286
www.westsystem.com

EMERGENCY TELEPHONE NUMBERS (24 HRS):
Transportation
CHEMTREC: 800-424-9300 (U.S.)
703-527-3887 (International)
Non-transportation
Poison Hotline: 800-222-1222

2. HAZARDS IDENTIFICATION

Classification of Substance or Mixture

Combustible dust

Label Elements

Hazard Pictogram(s):
None

Signal Word:
WARNING

Hazard Statements:
May form combustible dust concentrations in the air.

Precautionary Statements:
Prevention
Keep away from all ignition sources including heat, sparks and open flame.
Prevent dust accumulations to minimize explosion hazard.

Other Hazards
None known.

3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

INGREDIENT NAME	CAS #	CONCENTRATION (%)
Cellulose pulp (natural substance)	65996-61-4	70-90
Synthetic amorphous pyrogenic silica	112945-52-5	10-30

The exact chemical identity and/or exact percentage (concentration) of each ingredient has been held as confidential business information (CBI). Refer to Section 15 for additional information regarding this CBI claim.

4. FIRST AID MEASURES

FIRST AID FOR EYES..... SYMPTOMS: Excessive exposure may cause irritation and tearing.
RESPONSE: Flush with water for at least 15 minutes. Remove contact lenses if present and easy to do. Consult a physician as a precautionary measure if symptoms develop and persist.

FIRST AID FOR SKIN..... SYMPTOMS: May cause skin dryness or slight irritation. **RESPONSE:**
Wash with mild soap and water. Consult a physician if effects occur and persist.

FIRST AID FOR INHALATION..... SYMPTOMS: Excessive exposure may cause coughing, respiratory irritation or shortness of breath due to temporary lung overload. **RESPONSE:** Remove to fresh air if symptoms develop and keep comfortable for breathing. Seek medical advice is symptoms persist.

FIRST AID FOR INGESTION..... SYMPTOMS: 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, or dry chemical. Fog or mist is recommended if water is used. **NON-SUITABLE:** Avoid using high pressure media.

FIRE AND EXPLOSION HAZARDS: May form combustible dust concentrations in the air. See Section 9 for additional information.

SPECIAL FIRE FIGHTING PROCEDURES: Wear a self-contained breathing apparatus and complete full-body personal protective equipment. Dust may form an explosive mixture in the air, possibly resulting in a secondary explosion.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS AND PROTECTIVE EQUIPMENT: 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: Eliminate ignition sources. Use methods that avoid generating airborne dust. Use a vacuum with high efficiency particulate air (HEPA) filtration is recommended. Do not create a dust cloud by brushing or sweeping, or using compressed air.

ENVIRONMENTAL PRECAUTIONS:..... Contain spilled product to the extent practical and feasible.

7. HANDLING AND STORAGE

STORAGE TEMPERATURE (min./max.): 0°F (-17°C) / 100°F (38°C)

STORAGE:..... Store in cool, dry place. Store in sealed containers to prevent moisture absorption or absorption of other volatile materials. Keep away from sources of ignition.

HANDLING PRECAUTIONS: Avoid dust formation. Avoid breathing dust. Wash after handling. Provide appropriate exhaust ventilation at points of operation where dust can be generated. Avoid using compressed air. Dust may form explosive mixture with air. Take precautionary measures against static discharges. Metal parts of mixing and processing equipment should be earthed/grounded. Dust deposits should not be allowed to accumulate on surfaces.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION GUIDELINES: Safety glasses with side shields, or goggles if necessary.

SKIN PROTECTION GUIDELINES:..... Gloves or a barrier cream may be useful to help prevent skin from drying.

RESPIRATORY/VENTILATION GUIDELINES:..... Use with adequate general ventilation and/or local ventilation to keep exposures below established limits. When ventilation cannot be made adequate enough to keep exposures below established limits, use a NIOSH approved respirator with particulate filter, such as a N95 or greater, depending on specific workplace conditions. Consult with your respirator and cartridge 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 to the guidelines established in OSHA 1910.134 or other applicable respiratory protection standard.

ADDITIONAL PROTECTIVE MEASURES:..... Practice good caution and personal cleanliness to avoid skin and eye contact. Wash thoroughly after handling. Generally speaking, working cleanly and following basic precautionary measures will greatly minimize the exposure to this product under normal use conditions.

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
Cellulose pulp	65996-61-4	Dust and PNOS: ACGIH 10mg/m ³ , TWA, Inhalable; 3 mg/m ³ , TWA, Respirable; OSHA PEL 15 mg/m ³ , TWA, total dust; 5 mg/m ³ , TWA, Respirable
Synthetic amorphous pyrogenic silica	112945-52-5	Amorphous silica: OSHA PEL 6 mg/m ³ Dust and PNOS: ACGIH 10mg/m ³ , TWA, Inhalable; 3 mg/m ³ , TWA, Respirable; OSHA PEL 15 mg/m ³ , TWA, total dust; 5 mg/m ³ , TWA, Respirable

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Powder, solid.
COLOR: White.
ODOR:..... None.
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)..... 1.5
 BULK DENSITY..... No data available
 VAPOR DENSITY (air = 1)..... No data available
 EVAPORATION RATE (Butyl Acetate = 1)..... No data available
 WATER SOLUBILITY (% BY WT.)..... Only slightly soluble
 PARTITION COEFFICIENT, n-OCTANOL/WATER (log Pow)..... No data available
 KINEMATIC VISCOSITY:..... No data (mm²/s @ 20°C)
 DECOMPOSITION TEMPERATURE:..... No data available.
 % VOLATILE BY WEIGHT:..... Not applicable.
 EXPLOSIVE PROPERTIES:..... Dust may form explosive mixtures in air. Explosive properties of this mixture have not been measured. One or more of the components of this mixture have been identified as having the potential to form an explosive mixture with air when suspended as a dust cloud.
 Kst VALUE:..... No data available
 MAXIMUM EXPLOSION PRESSURE (Pmax)..... No data available
 MINIMUM IGNITION ENERGY (MIE):..... No data available
 MAXIMUM EXPLOSION CONCENTRATION (MEC):..... No data available
 DUST EXPLOSION CLASSIFICATION:..... No data available

10. STABILITY AND REACTIVITY

STABILITY:..... Product is stable at normal temperatures and pressures.
 REACTIVITY/HAZARDOUS REACTIONS:..... Product will not react by itself.
 INCOMPATIBILITIES:..... Strong oxidizing agents.
 CONDITIONS TO AVOID:..... Avoid settling dust collection and airborne dust formation.
 DECOMPOSITION PRODUCTS:..... Carbon monoxide, carbon dioxide.

11. TOXICOLOGICAL AND HAZARD ENDPOINT INFORMATION

Component Name	CAS#	LD ₅₀ Oral	LD ₅₀ Dermal	LC ₅₀ Inhalation
Cellulose pulp	65996-61-4	No data	No data	No data
Synthetic amorphous pyrogenic silica	112945-52-5	>5000 mg/kg	>2000 mg/kg	No data

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

SKIN CORROSION / IRRITATION:..... Not classified. Does not meet criteria for skin corrosion/irritation.

SERIOUS EYE DAMAGE / IRRITATION:..... Not classified. Does not meet criteria for skin eye damage/irritation. High dust concentrations may cause mechanical irritation.

RESPIRATORY SENSITIZATION:..... Not classified. Does not meet criteria for respiratory sensitizer.

SKIN SENSITIZATION:..... Not classified. Does not meet criteria for skin sensitization.

REPRODUCTIVE TOXICITY:..... Not classified. Does not meet criteria for reproductive toxicity.

MUTAGENICITY:..... Not classified. Does not meet criteria for mutagenicity.

CARCINOGENICITY:..... Not classified. Does not meet criteria for carcinogenicity.

No evidence of carcinogenicity was observed in multiple animal species following repeated oral or inhalation exposure to synthetic amorphous silica. Similarly, epidemiology studies show no evidence of carcinogenicity in workers who manufacture synthetic amorphous silica.

STOT (Single Exposure):..... Not classified. Does not meet STOT SE criteria.

STOT (Repeated Exposure):..... Not classified. Does not meet STOT RE criteria.

ASPIRATION HAZARD:..... Not classified. Does not meet aspiration toxicity criteria.

OTHER HEALTH HAZARD INFORMATION:..... None known.

12. ECOLOGICAL INFORMATION

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

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

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:..... Prevent release to the environment, sewers and natural waters.

Ingredient	CAS#	Ecotoxicity Classification Information
Cellulose pulp	65996-61-4	Not classified.
Synthetic amorphous pyrogenic silica	112945-52-5	Not classified.

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 (fuel blending) or reclaim 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.
 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	No data
South Korea	KECI	No data
China	IECSC	No data
Philippines	PICCS	No data
New Zealand	NZIoC	No data

US EPA SARA TITLE III Reporting and Notification Requirements:

Subject to Section 302 (TPQ) Not regulated.
 Subject to Section 304 (RQ)..... Not regulated.
 Subject to Section 311 or 312 Not regulated.
 Subject to Section 313 Not regulated.

Canada WHMIS Confidential Business Information (CBI):..... The HMIRA number issued for this CBI claim is #10268. The date of filing is 2016-08-08.

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
 Amorphous silica
 7631-86-9 or 112945-52-5

STATE CODE

PA, NJ, MA

16. OTHER INFORMATION

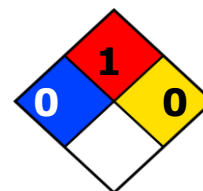
REASON FOR ISSUE:..... Updates to Sections 3 and 15 to Canada WHMIS 2015 requirements.
PREPARED BY:..... G. M. House
APPROVED BY:..... G. M. House
SDS CONTACT:..... safety@gougeon.com
TITLE:..... Health, Safety & Environmental Manager
APPROVAL DATE:..... August 16, 2016
SUPERSEDES DATE:..... June 1, 2015
SDS VERSION:..... 403-2016a

OTHER HAZARD INFORMATION AND RATING SYSTEMS:

HMIS® RATING

HEALTH:	0
FLAMMABILITY:	1
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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