SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:.....WEST SYSTEM® 410 Microlight® Filler
APPLICABLE PRODUCT CODES: .....410, 410-2, 410-7 and 410-B
CHEMICAL FAMILY:.....A blend of thermoplastic polymer microspheres and inorganic amorphous silicates.
INTENDED PRODUCT USES:.....Thickening agent for liquid epoxy resins.
PRODUCT RESTRICTIONS:.....None identified.
SDS VERSION: 410-2022a

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

Skin corrosion/irritation, Category 2
Eye damage/irritation, Category 2A
Combustible dust

Label Elements

Hazard Pictogram(s):

Signal Word:
WARNING

Hazard Statements:
H315 Causes skin irritation
H319 Causes serious eye irritation
May form combustible dust concentrations in the air

Precautionary Statements:
Prevention
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352 IF ON SKIN: Wash with plenty of soap and water
P332 + P313 If skin irritation occurs: Get medical attention/advice
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical attention/advice.
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 (%)
Amorphous sodium borosilicate	50815-87-7	30-60
Thermoplastic copolymer	25214-39-5	30-60
Formaldehyde polymer with 1,3-dimethylbenzene	26139-75-3	5-10
Isobutane	75-28-5	1-5
Tris-2, 4, 6-(dimethylaminomethyl) phenol	90-72-2	1-5
Synthetic amorphous pyrogenic silica	112945-52-5	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: 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 if symptoms develop and persist.

FIRST AID FOR SKIN..... SYMPTOMS: May cause skin irritation. RESPONSE: Wash with mild soap and water. Consult a physician if effects occur and persist. No specific treatment is known or anticipated.

FIRST AID FOR INHALATION..... SYMPTOMS: Excessive exposure may cause slight respiratory irritation. RESPONSE: Remove to fresh air if symptoms develop and keep comfortable for breathing. Seek medical advice if symptoms develop and 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 (CO_2), 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. Combustion may result in the release of carbon monoxide, carbon dioxide, hydrogen chloride, nitrogen oxides, formaldehyde, nitric acid and ammonia.

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. Downwind personnel should be evacuated.

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: ..... 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) / 95°F (35°C)

STORAGE:..... Store in cool, dry place. Keep container tightly closed in a dry, well-ventilated place. Do not store directly in the sun or in conditions exceeding 95°F (35°C). Keep away from sources of ignition or heat. Avoid storing near incompatible materials identified in Section 10.

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

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 goggles if necessary.

SKIN PROTECTION GUIDELINES:..... Liquid-proof gloves (such as neoprene or nitrile) should be used to prevent skin irritation. Barrier creams can be used effectively.

RESPIRATORY PROTECTION GUIDELINES: ..... 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 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. Do not eat, drink or smoke when handling this product. 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
Amorphous sodium borosilicate	50815-87-7	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
Thermoplastic copolymer	25214-39-5	No data available.
Formaldehyde polymer with 1,3-dimethylbenzene	26139-75-3	No data available.
Isobutane	75-28-5	ACGIH TLV TWA 1000 ppm (central nervous system) NIOSH REL TWA 800 ppm; 1900 mg/m^3
Tris-2, 4, 6-(dimethylaminomethyl) phenol	90-72-2	No data available.
Synthetic pyrogenic amorphous 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: ..... Beige-tan.
ODOR: ..... Slight.
ODOR THRESHOLD: ..... No data available
pH 10.5
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
EVAPORATIOIN RATE (Butyl Acetate = 1) ..... No data available
WATER SOLUBILITY (% BY WT.) ..... Largely insoluble.
PARTITION COEFFICIENT, n-OCTANOL/WATER (log Pow) ..... No data available
KINEMATIC VISCOSITY: ..... No data available (mm^2/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 and acids. Contact with hydrofluoric acid will cause the release of a toxic gas.

CONDITIONS TO AVOID: ..... Avoid settling dust collection and airborne dust formation. Avoid direct heat or excessive sunlight.

DECOMPOSITION PRODUCTS: ..... Carbon monoxide, carbon dioxide, hydrogen chloride, nitrogen oxides, ammonia.

11. TOXICOLOGICAL AND HAZARD ENDPOINT INFORMATION

Component Name	CAS#	LD_{50} Oral	LD_{50} Dermal	LC_{50} Inhalation
Amorphous sodium borosilicate	50815-87-7	No data	No data	No data
Thermoplastic copolymer	25214-39-5	No data	No data	No data
Formaldehyde polymer with 1,3-dimethylbenzene	26139-75-3	>2000 mg/kg	No data	No data
Isobutane	75-28-5	No data	No data	No data
Tris-2, 4, 6-(dimethylaminomethyl) phenol	90-72-2	2169 mg/kg	No data	No data
Synthetic pyrogenic amorphous 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:..... Causes skin irritation. Category 2.

SERIOUS EYE DAMAGE / IRRITATION:..... Causes serious eye irritation. Category 2A.

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. Does not contain components > 0.1% that are listed as a carcinogen by IARC, NTP or OSHA.

Synthetic amorphous silica: 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.

May contain trace amounts of acrylonitrile at levels <0.005% by weight. Acrylonitrile is listed by IARC as a Group 2B carcinogen, by NTP as a reasonably anticipated human carcinogen, and is specifically regulated by OSHA as a carcinogen.

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.

PERSISTANCE 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
Amorphous sodium borosilicate	50815-87-7	No data available.
Thermoplastic copolymer	25214-39-5	No data available.
Formaldehyde polymer with 1,3-dimethylbenzene	26139-75-3	No data available.
Isobutane	75-28-5	No data available.
Tris-2, 4, 6-(dimethylaminomethyl) phenol	90-72-2	Acute Aquatic 3; Chronic Aquatic 3
Synthetic pyrogenic amorphous silica	112945-52-5	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.

Reclaim or reuse 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/NDSL)	All ingredients are listed or otherwise compliant.
Australia	AICS	All ingredients are listed or otherwise compliant.
Japan	ENCS	Data is not available for component CAS# 50815-87-7.
South Korea	KECI	Data is not available for component CAS# 50815-87-7.
China	IECSC	Data is not available for component CAS# 50815-87-7.
Philippines	PICCS	Data is not available for component CAS# 50815-87-7.
New Zealand	NZIoC	Data is not available for component CAS# 50815-87-7.

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) ..... Not regulated.
Subject to Section 304 (RQ)..... Not regulated.
Subject to Section 311 or 312 ..... Refer to the health and physical classifications in section 2.
Subject to Section 313 ..... Not regulated.

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	**STATE CODE**
Amorphous silica 7631-86-9 or 112945-52-5	PA, NJ, MA
Isobutane 75-28-5	PA, NJ, MA
Tris-2, 4, 6-(dimethylaminomethyl) phenol 90-72-2	PA, NJ
Acrylonitrile	

107-13-1	<0.005%	PA, NJ, MA, [1]CA

[1.] These substances are known to the state of California to cause cancer or reproductive harm, or both.

16. OTHER INFORMATION

REASON FOR ISSUE: ..... Approval date change.
PREPARED BY: ..... Gougeon Brothers, Inc.
SDS CONTACT: ..... safety@gougeon.com
TITLE: ..... Health, Safety & Environmental Manager
APPROVAL DATE: ..... January 3, 2022
SUPERSEDES DATE: ..... December 9, 2019
SDS VERSION: 410-2022a

OTHER HAZARD INFORMATION AND RATING SYSTEMS:

HMIS® RATING

HEALTH:	**1**
FLAMMABILITY:	**2**
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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