

MATERIAL SAFETY DATA SHEET

Gougeon Brothers, Inc.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: WEST SYSTEM® 406™ Colloidal Silica.

PRODUCT CODE: 406

CHEMICAL FAMILY: Silicon.

CHEMICAL NAME:..... Silicon dioxide (amorphous).

FORMULA: SiO₂

MANUFACTURER:

Gougeon Brothers, Inc.
100 Patterson Avenue
Bay City, MI 48706, U.S.A.
Phone: 989-684-7286

EMERGENCY TELEPHONE NUMBERS:

Transportation
CHEMTREC:800-424-9300
Non-transportation
Poison Hotline:800-222-1222

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

<u>INGREDIENT NAME</u>	<u>CAS#</u>	<u>CONCENTRATION</u>
Silicon dioxide	7631-86-9	99%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS Hazard Rating: **Health - 1** **Flammability - 0** **Reactivity - 0**

CAUTION! Static ignition hazard. Avoid excessive breathing of airborne dust. White, fluffy powder with no odor.

PRIMARY ROUTE(S) OF ENTRY: Inhalation.

POTENTIAL HEALTH EFFECTS:

ACUTE INHALATION: If exposure limits are exceeded, the respiratory tract may become irritated. May cause shortness of breath, coughing, and/or chest tightness due to temporarily physically overloading the lungs.

CHRONIC INHALATION:..... May aggravate existing respiratory conditions. May cause dryness of mucous membranes of the respiratory tract.

ACUTE SKIN CONTACT: May cause irritation and dryness.

CHRONIC SKIN CONTACT: Repeated exposure may cause dermatitis due to drying of the skin.

EYE CONTACT: May cause irritation, redness and tearing.

INGESTION: No known health effects.

SYMPTOMS OF OVEREXPOSURE: Coughing, shortness of breath or irritation of the respiratory tract. Dry, chapped or irritated skin. Irritated or tearing eyes.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:
Skin and respiratory conditions, such as dermatitis and asthma.

4. **FIRST AID MEASURES:**

FIRST AID FOR EYES: Flush adequately with water to remove particles. If discomfort persists, seek medical advice.

FIRST AID FOR SKIN: Wash with soap and water. Apply moisturizing cream to replenish moisture in the skin if necessary.

FIRST AID FOR INHALATION: Remove to fresh air if effects occur. If effects persists, seek medical advice.

FIRST AID FOR INGESTION: No specific information.

5. **FIRE FIGHTING MEASURES:**

FLASH POINT: Greater than 535°F (COC, ASTM D-92).

EXTINGUISHING MEDIA: Water, dry chemical, halon or foam.

SPECIAL FIRE FIGHTING PROCEDURES:
No specific information.

6. **ACCIDENTAL RELEASE MEASURES:**

SPILL OR LEAK PROCEDURES: Sweep and shovel or use properly grounded vacuum equipment. Do so in a manner that minimizes airborne dust.

7. **HANDLING AND STORAGE:**

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

SHELF LIFE: Several years if stored properly.

STORAGE: Keep dry.

HANDLING PRECAUTIONS: Avoid handling that will unnecessarily generate airborne dust. Properly ground all material handling equipment to prevent static discharge.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

EYE PROTECTION GUIDELINES: Safety glasses or goggles are recommended, depending on the expected level of exposure.

SKIN PROTECTION GUIDELINES: Areas expected to have repeated exposure, such as hands, may need to be protected by an impervious material to prevent dryness. Barrier creams can be used effectively.

RESPIRATORY/VENTILATION GUIDELINES:

Work environments should be maintained below applicable exposure level through the use of engineering controls, such as dilution and exhaust ventilation. If this is not feasible, use a NIOSH approved dust mask/respirator for nuisance dust.

ADDITIONAL PROTECTIVE MEASURES:

Practice good industrial hygiene by washing with soap and water after each use. Apply moisturizing cream to replenish moisture if necessary.

OCCUPATIONAL EXPOSURE LIMITS: This product should be treated as a nuisance dust. Refer to OSHA's Permissible Exposure Level (PEL) or the ACGIH Guidelines for information on specific ingredients.

9. PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL FORM	Powder.
COLOR	White.
ODOR	Odorless.
BOILING POINT	No data.
MELTING POINT/FREEZE POINT	No data.
pH	No data.
SOLUBILITY IN WATER	Insoluble.
SPECIFIC GRAVITY	2.2
BULK DENSITY	0.33 pounds/gallon.
VAPOR PRESSURE	Not Applicable.
VAPOR DENSITY	Not Applicable.
% VOLATILE BY WEIGHT	0.0 (0.0 g/L)

10. REACTIVITY:

STABILITY: Stable.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITIES: A chemical reaction is possible with strong bases or hydrofluoric acid.

DECOMPOSITION PRODUCTS: Can include carbon monoxide (CO) and carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION:

Oral: LD₅₀ >5000 mg/kg (rats)

Inhalation: LD₅₀ > 2.08 mg/L 4hr.

Dermal: LD₅₀ >5000 mg/kg (rabbits)

CARCINOGENICITY:

NTP No.

IARC No.

OSHA No.

Data from chronic inhalation of treated and untreated silicas are currently under review.

12. ECOLOGICAL INFORMATION:

No information.

13. DISPOSAL CONSIDERATIONS:

WASTE DISPOSAL METHOD: This material is determined not to be a hazardous waste as per RCRA standards, either by listing or characteristics. Disposer must comply with all federal, state and local laws. Waste product may be sent to a landfill.

14. TRANSPORTATION INFORMATION:

D.O.T. SHIPPING NAME: Not regulated by DOT.

TECHNICAL SHIPPING NAME: Not applicable.

D.O.T. HAZARD CLASS: Not applicable.

U.N./N.A. NUMBER: Not applicable.

PACKING GROUP: Not applicable.

15. REGULATORY INFORMATION:

OSHA STATUS: Hazardous. Nuisance dust.

TSCA STATUS: All components are listed on TSCA inventory.

SARA TITLE III:

SECTION 313 TOXIC CHEMICALS None.

STATE REGULATORY INFORMATION:

The following chemicals are specifically listed or otherwise regulated by individual states. For details on your regulatory requirements you should contact the appropriate agency in your state.

COMPONENT NAME

/CAS NUMBER

CONCENTRATION

STATE CODE

None known.

16. OTHER INFORMATION:

REASON FOR ISSUE: Update in Section 16.
PREPARED BY: T. J. Atkinson
APPROVED BY: G. M. House
TITLE: Health, Safety & Environmental Manager
APPROVAL DATE: January 5, 2004
SUPERSEDES DATE: January 5, 2001
MSDS NUMBER: 406-04a

Note: The Hazardous Material Indexing System (HMIS), cited in the Emergency Overview of Section 3, uses the following index to assess hazard rating: 0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; and 4 = Severe.

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