

# WEST SYSTEM® 406 Colloidal Silica

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

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### SECTION 1: Identification

#### Identification

**Product name** : WEST SYSTEM® 406 Colloidal Silica

**Product code** : 406, 406-2, 406-7, 406-B.

#### Relevant identified uses of the substance or mixture and uses advised against

**Recommended use** : Thickening agent for liquid epoxy resins.

#### Details of the supplier of the safety data sheet

Gougeon Brothers, Inc  
100 Patterson Ave.  
Bay City, MI 48706 - U.S.A.  
T 866-937-8797 or 989-684-7286  
[www.westsystem.com](http://www.westsystem.com)

#### Emergency telephone number

**Emergency number** : CHEMTREC 1 (800) 424-9300  
CHEMTREC International +1 (703) 527-3887 24 hr

### SECTION 2: Hazard(s) identification

#### Classification of the substance or mixture

Not classified.

#### Label elements

**Hazard pictograms (GHS)** : None

**Signal word (GHS)** : None

**Hazard statements (GHS)** : None

**Precautionary statements (GHS)** : None

#### Other hazards

Handling and conveyance of material may create static electrical charge. Earth/ground handling and processing equipment to prevent against static discharge.

#### Unknown acute toxicity

Not applicable

### SECTION 3: Composition/information on ingredients

#### Substance

Not applicable

#### Mixtures

Name	Product identifier	HPR %
Silica, amorphous, fumed, crystalline-free	(CAS No) 112945-52-5	80 - 100

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.

### SECTION 4: First aid measures

#### Description of first aid measures

**First-aid measures after inhalation** : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

**First-aid measures after skin contact** : If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists.

**First-aid measures after eye contact** : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.

**First-aid measures after ingestion** : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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### Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation** : May cause respiratory tract irritation.
- Symptoms/injuries after skin contact** : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact** : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Symptoms/injuries after ingestion** : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

### Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

## SECTION 5: Firefighting measures

### Extinguishing media

- Suitable extinguishing media** : Foam. Carbon dioxide. Water. Dry chemical.
- Unsuitable extinguishing media** : Do not use a heavy water stream.

### Special hazards arising from the substance or mixture

- Fire hazard** : Products of combustion may include, and are not limited to: oxides of carbon.
- Reactivity** : No dangerous reaction known under conditions of normal use.

### Advice for firefighters

- Protection during firefighting** : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- General measures** : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

### For non-emergency personnel

No additional information available

### For emergency responders

No additional information available

### Environmental precautions

No additional information available

### Methods and material for containment and cleaning up

- For containment** : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up** : Vacuum or sweep material and place in a disposal container. Provide ventilation.

### Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

## SECTION 7: Handling and storage

### Precautions for safe handling

- Precautions for safe handling** : Avoid contact with skin and eyes. Do not swallow. Avoid generating and breathing dust. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Use only in well-ventilated areas. Handle and open container with care. When using do not eat, drink or smoke.

### Hygiene measures

- : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

### Conditions for safe storage, including any incompatibilities

- Storage conditions** : Keep out of the reach of children. Keep container tightly closed. Store in dust-tight, dry, labelled containers. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Store in dry, cool, well-ventilated area. Storage temperature : 0°F (-17°C) / 100°F (38°C).

## SECTION 8: Exposure controls/personal protection

### Control parameters

Silica, amorphous, fumed, crystalline-free (112945-52-5)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (Inhalable) 3 mg/m <sup>3</sup> (Respirable)

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Silica, amorphous, fumed, crystalline-free (112945-52-5)		
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (Amorphous silica) 15 mg/m <sup>3</sup> (Total dust) 5 mg/m <sup>3</sup> (Respirable fraction)

### Exposure controls

- Appropriate engineering controls** : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
- Hand protection** : Wear suitable gloves.
- Eye protection** : Safety glasses or goggles are recommended when using product.
- Skin and body protection** : Wear suitable protective clothing.
- Respiratory protection** : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Environmental exposure controls** : Maintain levels below Community environmental protection thresholds.
- Other information** : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

- Physical state** : Solid
- Appearance** : Powder
- Colour** : White
- Odour** : Odourless
- Odour threshold** : No data available
- pH** : No data available
- Melting point** : No data available
- Freezing point** : No data available
- Boiling point** : No data available
- Flash point** : No data available
- Relative evaporation rate (butylacetate=1)** : No data available
- Flammability (solid, gas)** : Not flammable
- Vapour pressure** : No data available
- Relative vapour density at 20 °C** : No data available
- Relative density** : 2.2
- Solubility** : Slightly soluble
- Partition coefficient n-octanol/water** : No data available
- Auto-ignition temperature** : No data available
- Decomposition temperature** : No data available
- Viscosity, kinematic** : No data available
- Viscosity, dynamic** : No data available
- Explosive limits** : No data available
- Explosive properties** : No data available
- Oxidising properties** : No data available

### Other information

No additional information available

## SECTION 10: Stability and reactivity

- Reactivity** : No dangerous reaction known under conditions of normal use.
- Chemical stability** : Stable under normal storage conditions.
- Possibility of hazardous reactions** : No dangerous reaction known under conditions of normal use.
- Conditions to avoid** : Heat. Avoid dust formation.

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**Incompatible materials** : None known.  
**Hazardous decomposition products** : May include, and are not limited to: oxides of carbon.

### SECTION 11: Toxicological information

#### Information on toxicological effects

Silica, amorphous, fumed, crystalline-free (112945-52-5)	
LD50 oral rat	> 5000 mg/kg OECD 401
LD50 dermal rabbit	> 2000 mg/kg OECD 402

**Acute toxicity (oral)** : Not classified.  
**Acute toxicity (dermal)** : Not classified.  
**Acute toxicity (inhalation)** : Not classified.  
**Skin corrosion/irritation** : Not classified.  
**Serious eye damage/irritation** : Not classified.  
**Respiratory or skin sensitization** : Not classified.  
**Germ cell mutagenicity** : Not classified.  
**Carcinogenicity** : Not classified.

Silica, amorphous, fumed, crystalline-free (112945-52-5)	
IARC group	3 - Not classifiable

**Reproductive toxicity** : Not classified.  
**STOT-single exposure** : Not classified.  
**STOT-repeated exposure** : Not classified.  
**Aspiration hazard** : Not classified.  
**Symptoms/injuries after inhalation** : May cause respiratory tract irritation.  
**Symptoms/injuries after skin contact** : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.  
**Symptoms/injuries after eye contact** : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.  
**Symptoms/injuries after ingestion** : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.  
**Other information** : Likely routes of exposure: ingestion, inhalation, skin and eye.

### SECTION 12: Ecological information

#### Toxicity

**Ecology - general** : May cause long-term adverse effects in the aquatic environment.

#### Persistence and degradability

WEST SYSTEM® 406 Colloidal Silica	
Persistence and degradability	Not established.

#### Bioaccumulative potential

WEST SYSTEM® 406 Colloidal Silica	
Bioaccumulative potential	Not established.

#### Mobility in soil

No additional information available

#### Other adverse effects

**Effect on the global warming** : No known effects from this product.

Name	Product identifier	Ecotoxicity Classification Information
Silica, amorphous, fumed, crystalline-free	(CAS No) 112945-52-5	Not classified

### SECTION 13: Disposal considerations

#### Waste treatment methods

**Product/Packaging disposal recommendations** : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

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### SECTION 14: Transport information

#### Department of Transportation (DOT) and Transportation of Dangerous Goods (TDG)

In accordance with DOT and TDG

Not regulated

#### Transport by sea

In accordance with IMDG

Not regulated

#### Transport by air

In accordance with IATA

Not regulated

### SECTION 15: Regulatory information

#### Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

#### International regulations

No additional information available

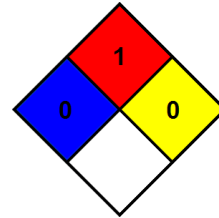
#### US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

### SECTION 16: Other information

**Date of issue** : 06/01/2015  
**Revision date** : 01/25/2019  
**Version** : 406-2019a  
**Other information** : None.

**NFPA health hazard** : 0  
**NFPA fire hazard** : 1  
**NFPA reactivity** : 0



HMIS III Rating  
**Health** : 0  
**Flammability** : 1  
**Physical** : 0

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