SECTION 1: Identification

Identification
Product name: WEST SYSTEM® 405 Filleting Blend
Product code: 405

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
Manufacturer
Gougeon Brothers, Inc
100 Patterson Ave.
Bay City, MI 48706 - U.S.A.
T 866-937-8797 or 989-684-7286
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
Comb. Dust

Label elements
Hazard pictograms (GHS):

Signal word (GHS): Warning

Hazard statements (GHS): May form combustible dust concentrations in air
Precautionary statements (GHS): Keep away from all ignition sources including heat, sparks and open flame. Prevent dust accumulations to minimize explosion hazard.

Other hazards
No additional information available
Unknown acute toxicity
Not applicable

SECTION 3: Composition/information on ingredients

Substance
Not applicable

Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>HPR %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walnut shell flour</td>
<td>(CAS No) Trade Secret</td>
<td>60 - 80</td>
</tr>
<tr>
<td>Pulp, cellulose</td>
<td>(CAS No) 65996-61-4</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Silica, amorphous, fumed, crystalline-free</td>
<td>(CAS No) 112945-52-5</td>
<td>5 - 10</td>
</tr>
</tbody>
</table>

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.

**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/attention immediately (show the label or SDS where possible).

### SECTION 5: Firefighting measures

**Extinguishing media**

- Unsuitable extinguishing media: Do not use a heavy water stream.

**Special hazards arising from the substance or mixture**

- Fire hazard: Combustible dust. Products of combustion may include, and are not limited to: oxides of carbon. Formaldehyde.
- Explosion hazard: Avoid generating dust. Airborne dust in sufficient concentrations when confined and exposed to a sufficient ignition source can explode.
- 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). Use water spray or fog for cooling exposed containers.

### SECTION 6: Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**General measures**: Remove all sources of ignition. Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (ie, clearing dust surfaces with compressed air). Use only non-sparking tools.

**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

- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with skin and eyes. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. 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. Handling this product may result in electrostatic accumulation. Use proper grounding procedures.

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. Keep away from sources of ignition. Store in well ventilated area. Storage temperature: 0°F (-17°C) / 100°F (38°C).

SECTION 8: Exposure controls/personal protection

Control parameters

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TWA (mg/m³)</th>
<th>OSHA PEL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulp, cellulose (65996-61-4)</td>
<td>10 mg/m³ (Inhalable) 3 mg/m³ (Respirable)</td>
<td>15 mg/m³ (Total dust) 5 mg/m³ (Respirable)</td>
</tr>
<tr>
<td>Silica, amorphous, fumed, crystalline-free (112945-52-5)</td>
<td>10 mg/m³ (Inhalable) 3 mg/m³ (Respirable)</td>
<td>6 mg/m³ (Amorphous silica) 15 mg/m³ (Total dust) 5 mg/m³ (Respirable)</td>
</tr>
<tr>
<td>Walnut shell flour (Trade Secret)</td>
<td>10 mg/m³ (Inhalable) 3 mg/m³ (Respirable)</td>
<td>15 mg/m³ (Total dust) 5 mg/m³ (Respirable)</td>
</tr>
</tbody>
</table>

Exposure controls

Appropriate engineering controls

- Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is not leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

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
WEST SYSTEM® 405 Filleting Blend
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<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Powder</td>
</tr>
<tr>
<td>Colour</td>
<td>Red-brown</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Combustible Dust</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.5</td>
</tr>
<tr>
<td>Solubility</td>
<td>Slightly soluble</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Dust may form explosive mixture in air</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Other information</td>
<td>No additional information available</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

- **Reactivity**: No dangerous reaction known under conditions of normal use.
- **Chemical stability**: Stable under normal storage conditions. May form combustible dust concentrations in air.
- **Possibility of hazardous reactions**: No dangerous reaction known under conditions of normal use.
- **Conditions to avoid**: Heat. Incompatible materials. Sources of ignition. Avoid dust formation.
- **Incompatible materials**: Strong oxidizing agents.
- **Hazardous decomposition products**: May include, and are not limited to: oxides of carbon. Formaldehyde.

SECTION 11: Toxicological information

Information on toxicological effects

<table>
<thead>
<tr>
<th>Substance</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, amorphous, fumed, crystalline-free (112945-52-5)</td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Acute toxicity (oral)</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Silica, amorphous, fumed, crystalline-free (112945-52-5)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
<td>3 - Not classifiable</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified.</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>Not classified.</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>Not classified.</td>
</tr>
</tbody>
</table>
WEST SYSTEM® 405 Filleting Blend
Safety Data Sheet

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

<table>
<thead>
<tr>
<th>WEST SYSTEM® 405 Filleting Blend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
</tr>
</tbody>
</table>

Bioaccumulative potential

<table>
<thead>
<tr>
<th>WEST SYSTEM® 405 Filleting Blend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulative potential</td>
</tr>
</tbody>
</table>

Mobility in soil

No additional information available

Other adverse effects

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Ecotoxicity Classification Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walnut shell flour</td>
<td>(CAS No) Trade Secret</td>
<td>No data available</td>
</tr>
<tr>
<td>Pulp, cellulose</td>
<td>(CAS No) 65996-61-4</td>
<td>Not classified</td>
</tr>
<tr>
<td>Silica, amorphous, fumed, crystalline-free</td>
<td>(CAS No) 112945-52-5</td>
<td>No data available</td>
</tr>
</tbody>
</table>

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.

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 sea

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 except for:
WEST SYSTEM® 405 Filleting Blend
Safety Data Sheet

<table>
<thead>
<tr>
<th>Pulp, cellulose (65996-61-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA TSCA Regulatory Flag</td>
</tr>
<tr>
<td>XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).</td>
</tr>
</tbody>
</table>

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 : 405-2019a
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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