

## SAFETY DATA SHEETS

**This SDS packet was issued with item:**

077277197

N/A



## MATERIAL SAFETY DATA SHEET

(Revision: 06/01/2011)

### 1. Identification of the Substance/Preparation and of the Company/Undertaking.

- Product Type: Phosphate Investment Casting Liquid
- Trade Names:
  - Ceramigold Lilac Liquid**
  - High Expansion Liquid**
  - PowerPlus Liquid**
  - Special Liquid Concentrate Max**
  - FastFire Liquid**
  - Old Style Special Liquid**
  - Special Liquid Concentrate**
  - Special Liquid Concentrate Plus**
  - Formula 1 Liquid**
  - Polyvest Liquid**
  - SpaceMaker Liquid**
  - Ti21 Liquid**
- Company: **Whip Mix Corporation**  
**361 Farmington Ave.**  
**Louisville, Kentucky, USA 40209**  
**Emergency Telephone Number: (502)-637-1451**  
**Fax Number: (502) 634-4512**

**Transportation** CHEMTREC 1(800) 424-9300 (U.S. and Canada)

**Emergencies:** International Calls: 1- 703-527-3887 (Collect calls accepted)

### 2. Hazard Identification.

- Not a hazardous material.
- Personal protective equipment not required during normal laboratory use.

### 3. Composition/Information on Ingredients.

Substance	Weight	CAS	EINECS	R	Symbols	S
Colloidal Silica (amorphous)	15 - 50%	112926-00-8	231-545-4	None	None	None
* Ethylene Glycol	<9%	107-21-1	203-473-3		None	S2

### 4. First-Aid Measures.

- This product has no known acute toxic effects which would require emergency first-aid measures.
- For eye contact, rinse with water and call a physician.

### 5. Fire-Fighting Measures.

- Unusual fire and explosion hazard: Contact with reactive metals (e.g. aluminum) may result in the generation of flammable hydrogen gas.

### 6. Accidental Release Measures.

- Do not allow liquid to dry. Cleanup with absorbent paper towels.

### 7. Handling and Storage.

Handling: No special treatment required.  
Storage: Keep container closed.

### 8. Exposure Controls/Personal Protection. Exposure Limits Only If Aerosolized Dried (See below).

- Personal protective equipment: None required during normal laboratory use.
- Primary route(s) of exposure: Eye, skin, inhalation
- Eye contact: Can cause transient irritation.
- Prevent inhalation exposure to excessive dust (if mixture dries out). May result in lung damage.
- Exposure limit to dried dust: 1.6 mg/m<sup>3</sup> as 8 hr TWA.
- Exposure limit: to aerosol of liquid: Ceiling Value of 100mg/m<sup>3</sup> for ethylene glycol.

### 9. Physical and Chemical Properties.

- Translucent odorless liquid - may be colored
- Density 10.3-10.4 lbs/gal
- Solubility in water Dispersible
- Specific gravity 1.24-1.25 @ 77°F
- pH (neat) 8.4-8.8

Viscosity	Max 6.0 cps @ 77°F
Boiling point	212°F @ 760 mm Hg
Flash point	None
<ul style="list-style-type: none"> <li>No dangerous reactions are known to occur with correct handling and storage.</li> </ul>	
<b>10. Stability and Reactivity.</b> <ul style="list-style-type: none"> <li>Basically stable. Avoid contact with aluminum.</li> </ul>	
<b>11. Toxicological Information.</b> <ul style="list-style-type: none"> <li>Acute oral toxicity (albino rats): LD<sub>50</sub> = Greater than 34,000 mg/kg</li> <li>Acute dermal toxicity (albino rabbits): LD<sub>50</sub> = Greater than 10,000 mg/kg</li> <li>Primary skin irritation test (albino rabbits): Skin irritation index draize rating: 0.125/8.0 minimally irritating.</li> <li>Primary eye irritation test (albino rabbits): eye irritation index draize rating: 4.0/110.0 minimally irritating.</li> <li>Inhalation of excessive dust (if the mixture dries out) may result in lung damage.</li> <li>Carcinogenicity: Not listed as carcinogen by OSHA, NTP or TARC</li> </ul>	
<b>12. Ecological Data.</b> <ul style="list-style-type: none"> <li>No ecotoxicological studies are available. See CERCLA section 14, if released into the environment.</li> </ul>	
<b>13. Disposal Considerations.</b> <ul style="list-style-type: none"> <li>Waste is not hazardous as defined by RCRA (40CFR 261)</li> <li>No special treatment required.</li> </ul>	
<b>14. Transport Information.</b> <ul style="list-style-type: none"> <li>No special transport requirements. Product is not regulated during transportation.</li> </ul>	
<b>15. Regulatory Information.</b> <ul style="list-style-type: none"> <li>OSHA Hazard Communications Standard, 29 CFR 1810.1200: None of the ingredients are hazardous.</li> <li>RCRA: This material is not defined as hazardous water, per 40 CFR 261.</li> <li>TSCA: These products contain materials listed in the TSCA inventory and is not otherwise regulated by TSCA Sec. 4, 5, 6, 7 or 12.</li> <li>CERCLA: Materials not reportable under CERCLA. Local requirements may vary.</li> <li>SARA: 311/312 hazard categories - immediate and delayed health, 313 reportable ingredients - none</li> <li>Does not contain any chemicals which require warning.</li> </ul>	
<b>16. Other Information.</b> <ul style="list-style-type: none"> <li>HMIS Rating: Health 1 Flammability 0 Reactivity 2 Other 0 Hazard: 4-Severe; 3-Serious; 2-Moderate; 1-Slight; 0-Minimum</li> </ul>	
Prepared By: Donna Ringo, CIH	Translated By:
Date: 6/13/2011	Date:

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**SAFETY DATA SHEET**  
**Regulation (EC) No 1907/2006 (REACH)**

(Revision: 6/13/2019; Supersedes: 12/14/2018)

**Section 1 Identification of the Substance/Preparation and of the Company/Undertaking.**

**1.1 Product Identifier:**

**Product Type:** Silica preparation

**Trade Names:** Fast Fire Liquid

**1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:**

**Product Use:** Investments for dental appliances

**Uses Advised Against:** For professional use only.

**1.3 Details of the Supplier of the Substance or Mixture:**

**Manufacturer:**

Whip Mix Corporation  
361 Farmington Avenue  
Louisville, Kentucky, USA 40209  
Emergency Telephone Number: (502) 634-1451  
Fax Number: (502) 634-4512

**EU Importer:**

Whip Mix Europe GmbH  
Wißstrasse 26 – 28  
D – 44137 Dortmund  
Germany  
+49 (0) 231 / 567 70 8-0

**1.4 Emergency Telephone Number:**

**Transportation Emergencies:** *CHEMTREC 1(800) 424-9300 (U.S. and Canada)*  
*International Calls: 1- 703-527-3887 (Collect calls accepted)*

**Other Product Information:** [www.whipmix.com](http://www.whipmix.com)

**Section 2 Hazard Identification.**

**2.1 Classification of the Mixture:**

**OSHA/WHMIS/GHS/CLP Classification (1272/2008):**

Health Hazards	Physical Hazards	Environmental Hazards
Not Hazardous	Not Hazardous	Not Hazardous

**2.2 Label Elements:**

None Required

**2.3 Other Hazards:** None

**Section 3 Composition/Information on Ingredients.**

**3.2 Mixture:**

<u>Substance</u>	<u>CAS No. / EC Number</u>	<u>%</u>	<u>CLP/GHS Classification (1272/2008)</u>
Distilled Water	7732-18-5	60-70%	Not classified
Amorphous Silica	7631-86-9	30-40%	Not classified

See Section 16 for full text of GHS Classifications.

**Section 4 First-Aid Measures.**

**4.1 Description of First Aid Measures:**

**Inhalation:** If symptoms of exposure develop, remove to fresh air. Seek medical attention if symptoms persist.

**Eyes:** Flush eyes with plenty of water. If irritation or other symptoms persist, seek medical attention.

**Skin:** Rinse skin with plenty of water. If skin irritation or redness develops, seek medical attention.

**Ingestion:** If swallowed, rinse mouth with water. Do not induce vomiting unless directed to by doctor or physician. If irritation or discomfort occurs, get medical attention.

**4.2 Most Important symptoms and effects, both acute and delayed:** Direct eye contact may cause slight eye irritation. Inhalation of mists may cause mucous membrane and upper respiratory tract irritation.

**4.3 Indication of any immediate medical attention and special treatment needed:** Immediate medical attention should not be required.

## Section 5 Fire-Fighting Measures.

**5.1 Extinguishing Media:** Use media appropriate for surrounding fire.

**5.2 Special Hazards Arising from the Substance or Mixture:** The product is not flammable or combustible.

**5.3 Advice for Fire-Fighters:** Firefighters should wear full emergency equipment and approved positive pressure self-contained breathing apparatus.

## Section 6 Accidental Release Measures.

**6.1 Personal Precautions, Protective Equipment and Emergency Procedures:** Wear appropriate protective clothing as described in Section 8. Wash hands after use. Avoid breathing mists.

**6.2 Environmental Precautions:** Report releases as required by local and national authorities.

**6.3 Methods and Material for Containment and Cleaning Up** Collect with an inert material and place in appropriate container for disposal or reuse.

**6.4 Reference to Other Sections:** Refer to Section 8 for personal protective equipment and Section 13 for disposal information.

## Section 7 Handling and Storage.

**7.1 Precautions for Safe Handling:** Avoid contact with eyes. Avoid prolonged contact with skin and clothing. Wash hands after use. Use with adequate ventilation. Keep containers closed when not in use.

**7.2 Conditions for Safe Storage, Including any Incompatibilities:** Store in a cool, dry, well-ventilated area away from incompatible materials. Protect from physical damage.

**7.3 Specific end use(s):**

**Industrial uses:** None identified

**Professional uses:** Model stones, plaster and die materials for dental technicians.

## Section 8 Exposure Controls/Personal Protection

### 8.1 Control Parameters:

Distilled Water	None Established
Amorphous Silica	80 mg/m <sup>3</sup> TWA OSHA PEL % SiO <sub>2</sub> 10 mg/m <sup>3</sup> TWA Belgium OEL 4 mg/m <sup>3</sup> (Inhalable) DFG MAK 6 mg/m <sup>3</sup> TWA (Inhalable) UK WEL 2.4 mg/m <sup>3</sup> (Respirable) UK WEL

Refer to local regulations for exposure limits not listed above.

### 8.2 Exposure Controls:

**Recommended Monitoring Procedures:** None.

**Appropriate engineering controls:** Use with adequate local exhaust ventilation to maintain exposures below the occupational exposure limits.

#### Personal Protective Measures

**Respiratory protection:** None normally required. If the exposure levels are excessive and irritation is experienced an approved dust/mist respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with applicable regulations and good industrial

hygiene practice.

**Skin protection:** For prolonged use wear rubber gloves. Contact your glove supplier for selection assistance. In Europe follow EN 374.

**Eye protection:** Chemical safety glasses or goggles are recommended to avoid eye contact. In Europe follow EN 166.

**Other:** Wear impervious clothing as needed to avoid contamination of personal clothing. In Europe follow EN 13034.

## Section 9 Physical and Chemical Properties.

### 9.1 Information on basic Physical and Chemical Properties:

**Appearance:** Violet Fluid

**Odor:** Odorless

**Odor threshold:** Not available

**Melting point/freezing point:** 32°F (0°C) (water)

**Flash point:** Not available

**Flammability (solid, gas):** Not applicable

**Flammable limits: LEL:** Not applicable

**Vapor pressure:** 23 mmHg @ 68°F (20°C)

**Relative density:** 1.20 g/mL at 68°F (20°C)

**Partition coefficient: n-octanol/water:** Not available

**Decomposition temperature:** Not available

**Explosive Properties:** Not applicable

**pH:** 9.5-10.3

**Boiling point:** 212°F (100°C) (water)

**Evaporation rate:** Not available

**UEL:** Not applicable

**Vapor density (air = 1):** Not available

**Solubility In Water:** Fully miscible

**Auto-ignition temperature:** Not applicable

**Viscosity:** Not available

**Oxidizing Properties:** Not applicable

### 9.2 Other Information: None available

## Section 10 Stability and Reactivity.

**10.1 Reactivity:** None reactive

**10.2 Chemical stability:** Stable under normal storage and handling conditions.

**10.3 Possibility of hazardous reactions:** None known.

**10.4 Conditions to avoid:** None known.

**10.5 Incompatible materials:** None known.

**10.6 Hazardous decomposition products:** Thermal decomposition may generate silicon oxides.

## Section 11 Toxicological Information.

### 11.1 Information on Toxicological Effects:

#### Potential Health Effects:

**Eyes:** Direct contact may cause slight eye irritation.

**Skin:** No adverse effects expected from the normal use of this product.

**Ingestion:** Swallowing may cause gastrointestinal irritation, nausea, dizziness, drowsiness, slurred speech and stupor.

**Inhalation:** Inhalation of mists may cause irritation to the nose, throat and upper respiratory tract.

**Chronic Health Effects:** None currently known.

#### Acute Toxicity Data:

Amorphous Silica: Oral rat LD50 >5000 mg/kg, Inhalation rat LC0 >0.39 mg/L/4 hr., LD50, Dermal rabbit LD50 >2000 mg/kg

**Skin corrosion/irritation:** This product is not expected to cause skin irritation.

**Eye damage/ irritation:** This product is not expected to cause eye irritation. Once the liquid has evaporated, dust may cause mechanical irritation.

**Respiratory Irritation:** This product is not expected to cause respiratory irritation.

**Respiratory Sensitization:** This product is not expected to cause respiratory sensitization.

**Skin Sensitization:** This product is not expected to cause skin sensitization.  
**Germ Cell Mutagenicity:** Not expected to cause mutagenic activity.  
**Carcinogenicity:** None of the components of this product are listed as carcinogens by OSHA, IARC, NTP, and the EU CLP.  
**Reproductive Toxicity:** None of the component are classified as being toxic to reproduction.  
**Specific Target Organ Toxicity:**  
     Single Exposure: No data available.  
     Repeat Exposure: No data available.  
**Aspiration Hazard:** This product does not meet the criteria for aspiration toxicity.

## Section 12 Ecological Data.

**12.1 Ecotoxicity:** Amorphous Silica: 96 hr. LC50 Danio rerio >10,000 mg/L, 24 hr. EC50 daphnia magna >1000 mg/L, 72 hr. EC50 Desmodesmus subspicatus >10000 mg/L  
**12.2 Persistence and degradability:** No data available.  
**12.3 Bioaccumulative potential:** No data available.  
**12.4 Mobility in soil:** No data available.  
**12.5 Results of PBT and vPvB assessment:** Not required.  
**12.6 Other adverse effects:** Not required.

## Section 13 Disposal Considerations.

**13.1 Waste Treatment Methods:** Dispose in accordance with all national and local regulations.

## Section 14 Transport Information.

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT		Not Regulated			
Canadian TDG		Not Regulated			
EU ADR/RID		Not Regulated			
IMDG		Not Regulated			
IATA/ICAO		Not Regulated			

**14.6 Special precautions for User:** Not applicable  
**14.7 Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code):** Not applicable – product is transported only in packaged form.

## Section 15 Regulatory Information.

### 15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:

#### US Regulations

**SARA Section 313 (40 CFR 372):** This product contains the following toxic chemical(s) subject to reporting requirements of SARA 313: None

**SARA Section 311/312 (40 CFR 370) Hazard Categories:** See OSHA Hazard Classification in Section 2.

**Comprehensive Environmental Response and Liability Act of 1980 (CERCLA):** This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

**Toxic Substances Control Act (TSCA):** All of the components of this product are listed on or exempt from on the TSCA inventory.

**California:** This product does not contain substances known in the state of California to cause cancer and/or

reproductive toxicity.

#### **International Chemical Inventories**

**Australia:** All of the components in this product are listed on the Australian Inventory of Chemical Substances (AICS) or exempt.

**Canada:** All of the components of this product are listed on the Canadian Domestic Substances List (DSL) or exempt.

**China:** All of the components in this product are listed on the Inventory of Existing Chemical Substances in China (IECSC) or exempt.

**European Union:** All the components in this product are listed on the EINECS inventory or exempt.

**Korea:** All of the components in this product are listed on the Korean Existing Chemicals List (KECL) or exempt.

**New Zealand:** All of the components in this product are listed on the New Zealand Inventory of Chemicals (NZIoC) or exempt.

**Philippines:** All of the components of this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) or exempt.

**United States:** All of the components of this product are listed on the US Toxic Substances Control Act (TSCA) inventory

**15.2 Chemical safety assessment:** None required.

#### **16. Other Information.**

HMIS Rating: Health 1 Flammability 0 Physical Hazard 0  
*Hazard: 4-Severe; 3-Serious; 2-Moderate; 1-Slight; 0-Minimum*

#### **SDS Revision History:**

10/12/2016: Updated Sections 1-16

12/14/2018: Updated Sections 1-16

06/13/2019: Updated Sections 2, 8, 15. Corrected format errors.

**Date of last revision:** June 13, 2019

CLP/GHS Classification and H Phrases for Reference (See Section 3)  
None.

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Date: June 13, 2019	Date: