



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

(Revision: 2/5/2020; Supersedes: 6/13/2019)

**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
Eye Irritant Category 2A (H319) Skin Irritant Category 2 (H315) Specific Target Organ Toxicity Repeated Exposure Category 2 (H373)	Not Hazardous	Not Hazardous

**2.2 Label Elements:**

Warning!



Contains: Ethylene glycol and Sodium Hydroxide

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H373 May cause damage to kidneys through prolonged or repeated exposure by ingestion.

**Prevention**

P260 Do not breathe mist.

P264 Wash thoroughly after handling.

P280 Wear protective gloves and eye protection.

**Response**

P314 Get medical attention if you feel unwell.

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.

P302+P352 IF ON SKIN: Wash with plenty of water.

P332+P313 If skin irritation occurs: Get medical attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

#### Disposal

P501 Dispose of contents and container in accordance with local and national regulations.

### 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	40-70%	Not classified
Amorphous Silica	7631-86-9	25-50%	Not classified
Ethylene Glycol	107-21-1	5-10%	Acute Tox. 4 (H302) STOT RE 2 (H373)
Sodium Hydroxide	1310-73-2	<2%	Met. Corr. 1 (H290) Eye Dam. 1 (H318) Skin Corr. 1A (H314)

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 large quantities of water for several minutes, while holding the eyelids apart. Remove contact lenses if easy to do so. Continue rinsing. Get medical attention if irritation persists.

**Skin:** Remove contaminated clothing and shoes. Flush skin thoroughly with water for several minutes. Get medical attention if irritation occurs. Launder clothing before re-use.

**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 contact may cause moderate eye and skin irritation. Inhalation of mists may cause mucous membrane and upper respiratory tract irritation. Prolonged or repeated exposure to Ethylene glycol may damage kidneys.

**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, 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> TWA (Respirable) UK WEL
Ethylene Glycol	25 ppm TWA, 50 ppm STEL ACGIH TLV (vapor fraction) 20 ppm TWA, 40 ppm STEL (15 min average value) Belgium OEL 20 ppm TWA, 40 ppm STEL (15 min average value) EU OEL 10 ppm TWA DFG MAK (inhalable fraction and vapor) 20 ppm STEL (15 min reference) DFG MAK (inhalable fraction and vapor) 10 mg/m <sup>3</sup> TWA UK WEL (as particulates)
Sodium Hydroxide	2 mg/m <sup>3</sup> Ceiling ACGIH TLV 2 mg/m <sup>3</sup> TWA OSHA PEL 2 mg/m <sup>3</sup> STEL UK WEL 2 mg/m <sup>3</sup> TWA Belgium OEL

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 Measurers**

**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:** Use wear rubber gloves. Contact your glove supplier for selection assistance. In Europe follow EN 374.

**Eye protection:** Chemical safety 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:** 17.3 mmHg @ 77°F (25°C)

**Relative density:** ~1.30 g/cm<sup>3</sup> @ 68°F (20°C)

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

**Decomposition temperature:** Not available

**Explosive Properties:** Not applicable

**pH:** 9.2-9.9

**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 moderate eye irritation.

**Skin:** May cause moderate skin irritation.

**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:** Prolonged or repeated exposure to Ethylene glycol may damage kidneys.

#### Acute Toxicity Data:

Amorphous Silica: Oral rat LD<sub>50</sub> >5000 mg/kg, Inhalation rat LC<sub>0</sub> >0.39 mg/L/4 hr., LD<sub>50</sub>, Dermal rabbit LD<sub>50</sub> >2000 mg/kg

Ethylene Glycol: Oral rat LD<sub>50</sub> 7712 mg/kg; Inhalation rat LC<sub>50</sub> >2.5 mg/L/6 hr Dermal rabbit LD<sub>50</sub> >3500 mg/kg

Sodium Hydroxide: Skin rabbit LD<sub>50</sub> 1350 mg/kg

**Skin corrosion/irritation:** This product is expected to cause skin irritation.

**Eye damage/ irritation:** This product is 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: In a 16 week oral study, rats were administered 50, 150, 500 or 1000 mg/kg of ethylene glycol in their diet. After 16 weeks of exposure the renal toxicity was severe enough to

impact the kidneys ability to process the ethylene glycol and eliminate it in urine. NOEL 150 mg/kg  
**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

Ethylene glycol: 96 hr LC50 Pimephales promelas 72,860 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 96 Hr EC50 Pseudokirchneriella subcapitata 6500-13,000 mg/L

**12.2 Persistence and degradability:** Ethylene glycol is readily biodegradable.

**12.3 Bioaccumulative potential:** Ethylene glycol has a BCF of 10 which suggest the potential for bioconcentration is low.

**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: Ethylene Glycol 107-21-1 5-10%

**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):** Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for this product, based on the RQ for Ethylene Glycol (10% maximum) of 5,000 lbs., is 50,000 lbs. 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:**  WARNING: This product can expose you to ethylene glycol, which is known to the State of California to

cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### **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 2\* 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.  
2/5/2020: Updated all sections.

**Date of last revision:** February 5, 2020

#### CLP/GHS Classification and H Phrases for Reference (See Section 3)

Acute Tox. 4 Acute Toxicity Category 4  
Eye Dam. 1 Eye Damage Category 1  
Met. Corr. 1 Corrosion to metals Category 1  
Skin Corr. 1A Skin Corrosion Category 1A  
STOT RE 2 Specific Target Organ Toxicity Repeated Exposure Category 2  
H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H373 May cause damage to organs through prolonged or repeated exposure.

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Date: February 5, 2020	Date: