



**SAFETY DATA SHEET**

(Revision: 10/17/2014)

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

- **Product Type:** Model Stones, Plasters and Die Materials

- **Trade Names:**

Bitestone	Buffstone	Die Stone, Ivory	FlowStone
Jade Stone	Hard Rock	Handi Mix	Laboratory Plaster
FlowStone, Black	Lean Rock Ivory	Microstone	Mounting Plaster
Prima-Rock	Quickstone	RapidFlask	ResinRock
Mounting Stone	Silky-Rock	Snap Stone	SpinBase
Super Die	CAD Stone	Economy Stone	SpinStone
Ulti Rock			

Orthodontic Stone\*      Orthodontic Plaster\*

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

\* All sections apply to this product, in addition, the items identified by an \* are related specifically to Orthodontic Stone and Orthodontic Plaster only.

**2. Hazard Identification**

**OSHA Hazcom 2014 Classification:**

Health Hazards	Physical Hazards
Specific Target Organ Toxicity – Repeat Exposure Category 1A Carcinogen Category 1A	Not Hazardous

**Labeling:**

Danger!



May cause cancer if inhaled.  
 Causes damage to lung through prolonged or repeated exposure by inhalation.

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe dust.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves and eye protection.
- IF exposed or concerned: Get medical attention.
- Get medical attention if you feel unwell.
- Store locked up.
- Dispose of contents and container in accordance with local and national regulations.

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

<u>Substance</u>	<u>CAS No.</u>	<u>%</u>
Plaster of Paris	26499-65-0	0 – 100
Calcium Sulfate Hemihydrate	10034-76-1	0 - 100

Crystalline Silica	14808-60-7	< 5
Ammonium Chloride	12125-02-9	< 5
Boric Acid	10043-35-3	< 2

The exact concentration is being withheld as a trade secret.

**4. First-Aid Measures.**

**Inhalation:** Remove exposed person to fresh air. If irritation or other symptoms persist, get medical attention.

**Eyes:** Flush with large quantities of water, holding the eyelids apart. If irritation persists consult a physician.

**Skin:** No first aid is generally required. Wash skin with soap and water.

**Ingestion:** May cause gastrointestinal discomfort and intestinal blockage. If swallowed, drink 1 or 2 glasses of water to dilute. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

**Most important symptoms/effects, acute and delayed:** May cause eye irritation. Inhalation of dust may cause mucous membrane and respiratory irritation. When mixed with water, this material hardens and becomes very hot – may cause burns.

**Indication of Any Immediate Medical Attention and Special Treatment Needed:** Immediate medical attention is required for ingestions.

**5. Fire-Fighting Measures.**

**Suitable (and unsuitable) Extinguishing Media:** Use media appropriate for surrounding fire. Water may cause product to solidify.

**Specific Hazards Arising From the Chemical:** The product does not burn but will decompose producing calcium oxide and sulfur oxides.

**Special Protective Equipment and Precautions for Fire-fighters:** Firefighters should wear full emergency equipment and approved positive pressure self-contained breathing apparatus. Cool fire exposed containers with water.

**6. Accidental Release Measures.**

**Personal Precautions, Protective Equipment and Emergency Procedures:** Wear appropriate protective clothing as described in Section 8.

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

**Methods and Materials for Containment and Cleaning up:** Collect using dustless method (HEPA vacuum or wet method) and place in appropriate container for use. Do not use compressed air.

**7. Handling and Storage.**

**Precautions for Safe Handling:** Avoid contact with eyes. Do not breathe dust. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation and proper dust collection methods to keep exposure level below occupational exposure limits. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.

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

**8. Exposure Controls/Personal Protection**

**Occupational Exposure Limits:**

Plaster of Paris	5 mg/m <sup>3</sup> TWA OSHA PEL (respirable fraction) 15 mg/m <sup>3</sup> TWA OSHA PEL (total dust)
Calcium Sulfate Hemihydrate (as PNOC)	5 mg/m <sup>3</sup> TWA OSHA PEL (respirable fraction) 15 mg/m <sup>3</sup> TWA OSHA PEL (total dust)
Crystalline Silica Quartz	$\frac{10 \text{ mg/m}^3}{\% \text{ Silica} + 2}$ TWA PEL (respirable fraction) $\frac{30 \text{ mg/m}^3}{\% \text{ Silica} + 2}$ TWA PEL (total dust)
Ammonium Chloride	10 mg/m <sup>3</sup> TWA, 20 mg/m <sup>3</sup> STEL ACGIH TLV (fume)
Boric Acid	2 mg/m <sup>3</sup> TWA, 6 mg/m <sup>3</sup> STEL ACGIH TLV (inhalable fraction)

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

**Respiratory protection:** If the exposure limits are exceeded a NIOSH approved particulate respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 or other applicable regulations and good industrial hygiene practice.

**Skin protection:** For prolonged use or in dusty conditions, wear rubber gloves.

**Eye protection:** Chemical safety goggles if needed to avoid eye contact.

**Other:** Impervious clothing as needed to avoid contamination of personal clothing.

## 9. Physical and Chemical Properties.

**Appearance:** Powder, with variety of colors

**Odor:** Odorless.

**Odor threshold:** Not applicable

**Melting point/freezing point:** 145°

**Flash point:** Not applicable

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

**Flammable limits: LEL:** Not applicable

**Vapor pressure:** Not applicable

**Relative density:** 2.5 – 3.5

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

**Decomposition temperature:** 2642°F / 1450°C

**pH:** 145°

**Boiling point:** Not applicable

**Evaporation rate:** Not applicable

**UEL:** Not applicable

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

**Solubility In Water:** 0.2%

**Auto-ignition temperature:** Not applicable

**Viscosity:** Not applicable

## 10. Stability and Reactivity.

**Reactivity:** None known.

**Chemical stability:** Stable

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

**Conditions to avoid:** Avoid unintentional contact with water. Product will harden and produce heat.

**Incompatible materials:** Avoid acids and oxidizing agents.

**Hazardous decomposition products:** Thermal decomposition (above 2642°F/1450°C) may generate calcium oxide and sulfur dioxide Crystalline silica will dissolve in hydrofluoric acid and produce silicone tetrafluoride.

## 11. Toxicological Information.

### Potential Health Effects:

**Eyes:** Dust may cause mechanical irritation and possible injury.

**Skin:** Dust may cause irritation. When mixed with water, the plaster of paris hardens and becomes hot – may cause skin burns.

**Ingestion:** No adverse effects expected for normal, incidental ingestion. Large amounts may cause gastrointestinal blockage and discomfort.

**Inhalation:** Inhalation of dust may cause irritation to the nose, throat and upper respiratory tract with coughing and shortness of breath.

**Chronic Health Effects:** Excessive inhalation of respirable crystalline silica dust may cause may cause a progressive, disabling and sometimes fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function.

**Carcinogenicity:** Crystalline silica quartz is listed as “Carcinogenic to Humans” (Group 1) by IARC and “Known to be a Human Carcinogen” by NTP. None of the other components of this product are listed as carcinogens by OSHA, IARC or NTP.

### Acute Toxicity Data:

Plaster of Paris: Oral rat LD50 > 2000 mg/kg; Inhalation rat LC50 > 3.26 mg/L/4 hr

Calcium Sulfate Hemihydrate: No data available

Crystalline Silica Quartz: Oral rat LD50 >22,500 mg/kg

Ammonium Chloride:

Boric Acid:

## 12. Ecological Data.

### Ecotoxicity:

Plaster of Paris: Oral rat LD50 > 2000 mg/kg; Inhalation rat LC50 > 3.26 mg/L/4 hr

Calcium Sulfate Hemihydrate: No data available

Crystalline Silica Quartz: Oral rat LD50 >22,500 mg/kg

Ammonium Chloride:

Boric Acid:

**Persistence and degradability:** Biodegradation is not applicable to inorganic substances such as plaster of paris, calcium sulfate hemihydrate and crystalline silica, quartz.

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**Other adverse effects:** Not required.

### 13. Disposal Considerations.

Dispose in accordance with all national and local regulations.

### 14. Transport Information.

US DOT: Not Regulated

Canada TDG: Not Regulated

IMDG: Not Regulated

IATA/ICAO: Not Regulated

**Special precautions:** Not applicable

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Not applicable – product is transported only in packaged form.

### 15. Regulatory Information.

#### Safety, health, and environmental regulations specific for the product in question

#### 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:** Chronic Health

**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 the TSCA inventory

**California:** This product contains the following substances known to the state of California to cause cancer and/or reproductive toxicity:

Crystalline Silica	14808-60-7	<5%	Cancer
--------------------	------------	-----	--------

#### International Regulations

**Canadian Workplace Hazardous Materials Information System (WHMIS):** Class D Division 2A (Very Toxic material causing other toxic effects)

This SDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the SDS contains all of the information required by the CPR.

### 16. Other Information.

•HMIS Rating: Health 1\* Flammability 0 Reactivity 0 Other 0

Hazard: 4-Severe; 3-Serious; 2-Moderate; 1-Slight; 0-Minimum

Prepared By: <i>Denise A. Deeds</i>	Translated By:
Date: October 17, 2014	Date: