

## Safety Data Sheet

### **Section 1: Identification**

**Product Identifier:** Mainstay ML-72 FS Fast Set Microsilica Restoration Mortar

**Manufacturer:**

Madewell Products Corporation

7561 Industrial Court

Alpharetta, GA 30004

Phone: (770) 475-8199

Emergency: PERS 1-800-633-8253

**Recommended Use:** recommended for filling and restoring voids in concrete or brick structures

### **Section 2: Hazard(s) Identification**

**Hazard Classification:** This products is classified as hazardous as defined with the OSHA Hazard Communication Standard 29CFR1910.1200.

**Signal Word(s):** Danger

**Hazard Statement(s):**

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

May cause respiratory irritation.

May cause cancer.

**Hazard Pictograms:**



**Precautionary Statement(s):** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Use outdoors in a well ventilated area. Wash any exposed body parts thoroughly after use. Wear protective gloves and clothing. Wear eye and face protection.

**Hazards Not Otherwise Classified (HNOC):** None known.

**Additional Information:** Respirable crystalline silica (RCS) may cause cancer. Repeated inhalation of respirable crystalline silica (quartz) may cause lung cancer according to IARC and NTP. ACGIH states that it is a suspected cause of cancer.

### **Section 3: Composition/Information on Ingredients**

**Chemical or Mixture:** Mixture

Ingredient:	Percentage:	CAS #:
Portland cement	20-30	65997-15-1
Calcium aluminate cement	5-10	1305-78-8
Ethylene vinyl acetate/vinyl alcohol copolymer	<1	26221-27-2
Silicon dioxide	5-10	69012-64-2
Crystalline silica	60-70	14808-60-7

Any concentration shown as a range is to protect confidentiality or is due to process variation.

## **Section 4: First-Aid Measures**

### ***Necessary First-Aid Instructions by Relevant Routes of Exposure:***

**Eye Contact:** Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

**Skin Contact:** Heavy exposure to mortar dust or wet blended mortar requires immediate medical attention. Remove contaminated clothing, shoes, and accessories. Wash thoroughly with pH-neutral or mild soap and water. Seek medical attention for any onset of rashes, burns, irritation, or dermatitis. Cement mortar can cause skin burns with little warning, hours after exposure. Chemical burns must be treated promptly by a physician and should be treated as caustic burns. Avoid further exposure if any of these symptoms occur.

**Inhalation:** If coughing or other symptoms do not subside, seek medical help. Inhalation of large amounts of portland cement and crystalline silica is a serious health concern and requires immediate medical attention. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If the individual is not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in a recovery position and get medical attention immediately. Maintain an open airway.

**Ingestion:** Get medical attention immediately. Call a poison center or physician. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING unless directed to do so by medical personnel. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed, and the exposed person is conscious, give small quantities of water to drink. Have victim drink 8 oz of water. Stop giving water if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

### ***Important Symptoms or Effects:***

**Eye Contact:** Exposure to airborne dust may cause immediate or delayed irritation or inflammation. Exposure to large amounts of dry powder or splashes of wet blended cement may cause effects ranging from moderate eye irritation to chemical burns and blindness.

**Skin Contact:** Exposure to wet blended cement may cause burns or an allergic reaction.

**Inhalation:** Mild and temporary discomfort to respiratory tract similar to nuisance dust. Excessive inhalation of mortar dust is a serious health concern.

**Ingestion:** May cause burns to mouth, throat and stomach.

***Recommendations for Immediate Medical Care:***

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Section 5: Fire-Fighting Measures**

**Suitable Extinguishing Equipment:** Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable Extinguishing Equipment:** Do not use water-based fire extinguishers or water jet.

**Specific Hazards Arising from the Chemical:** Not flammable or combustible.

**Special Protective Equipment & Precautions for Firefighters:** Move containers from fire area if this can be done without risk. Use water spray to keep fireexposed containers cool. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Section 6: Accidental Release Measures**

**Personnel Measures:** Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**Cleanup Procedures:** Collect dry material using a scoop. Avoid actions that cause dust to become airborne. Scrape up wet material and place in an appropriate container. Allow the material to dry/harden before disposal. Do not attempt to wash blended cement down drains. Dispose of in accordance with applicable local and federal environmental control regulations. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has entered the environment, including waterways, soil or air. Materials can enter waterways through drainage systems.

**Section 7: Handling and Storage**

**Protective Measures:** Put on appropriate personal protective equipment. Persons with a history of skin sensitization should not be in contact with this product. Obtain and follow special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

**Advice on General Hygiene Practices:** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before and after eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

**Additional Precautions for Safe Handling:** Portland cement mortar reacts with water to create calcium hydroxide, which can cause severe chemical burns. Every attempt should be made to avoid skin and eye contact with cement. Do not get portland cement mortar inside boots, shoes or gloves. Do not allow wet, saturated clothing to remain against the skin. Promptly remove clothing and shoes that are dusty or wet with cement mortar. Adequately clean clothing and shoes before reuse. Do not enter a confined space that stores or contains wet cement mortar unless appropriate procedures and protection are available.

**Storage:** Keep dry until use. Keep mortar in the original container or an approved alternative made from a compatible material, and keep the container tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

### **Section 8: Exposure Controls/Personal Protection**

USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable fraction)
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup> (particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable dust)
USA IDLH	US IDLH (mg/m <sup>3</sup> )	5000 mg/m <sup>3</sup>

**Engineering Controls:** Use only with adequate ventilation. If user operations generate dust, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental Exposure Controls:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

**Eye Protection:** Industrial safety glasses as necessary to comply with 29 CFR 1910.133 as dictated by work area conditions.

**Skin Protection:** Impervious coveralls, rubber safety boots, cap, and rubber gloves. Apply barrier cream to exposed areas of face.

**Respiratory Protection:** Full face piece respiratory units required when spraying this material, combination filter/organic vapor cartridges or canisters may be used. Use NIOSH/OSHA self-contained breathing apparatus.

### **Section 9: Physical and Chemical Properties**

**Physical State:** Solid

**Appearance:** Gray

**Odor:** Odorless

**Odor Threshold:** Not available

**pH:** 12-13 (in water)

**Evaporation Rate:** Not available

**Melting Point:** Not available

**Freezing Point:** Not available

**Boiling Point:** >1000 °C (>1,832 °F)

**Flash Point:** Not available

**Auto-ignition Temperature:** Not available

**Decomposition Temperature:** Not available  
**Flammability (solid, gas):** Not available  
**Lower Flammable Limit:** Not available  
**Upper Flammable Limit:** Not available  
**Vapor Pressure:** Not available  
**Relative Vapor Density at 20°C:** Not available  
**Specific Gravity:** 3.15 (Water=1)  
**Solubility in Water:** 0.1-1 % (slightly soluble)  
**Partition Coefficient:** N-Octanol/Water: Not available  
**Viscosity:** Not available

### **Section 10: Stability and Reactivity**

**Reactivity:** May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

**Chemical Stability:** Stable under recommended handling and storage conditions (see Section 7).

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Incompatible materials.

**Incompatible Materials:** Acids, oxidizers, ammonium salts, aluminum metal, diazomethane, phosphorus.

**Hazardous Decomposition Products:** None expected under normal conditions of use.

### **Section 11: Toxicological Information**

**Acute Toxicity (Oral):** Not classified

**Acute Toxicity (Dermal):** Not classified

**Acute Toxicity (Inhalation):** Not classified

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Causes severe skin burns and eye damage.

**Eye Damage/Irritation:** Causes serious eye damage.

**pH:** 12-13 (in water)

**Respiratory or Skin Sensitization:** May cause an allergic skin reaction.

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** May cause cancer (Inhalation).

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** May cause respiratory irritation.

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Irritation of the respiratory tract and the other mucous membranes. May be corrosive to the respiratory tract. The three types of silicosis include: 1) Simple chronic silicosis – which results from long-term exposure (more than 20 years) to low amounts of respirable crystalline silica. Nodules of chronic inflammation and scarring provoked by the respirable crystalline silica form in the lungs and chest lymph nodes. This disease may feature breathlessness and may resemble chronic obstructive pulmonary disease (COPD); 2) Accelerated silicosis – occurs after exposure to larger amounts of respirable crystalline silica over a shorter period of time (5-15 years); 3) Acute silicosis – results from short-term exposure to very large amounts of respirable crystalline silica.

The lungs become very inflamed and may fill with fluid, causing severe shortness of breath and low blood oxygen levels. Inflammation, scarring, and symptoms progress faster in accelerated silicosis than in simple silicosis. Progressive massive fibrosis may occur in simple or accelerated silicosis, but is more common in the accelerated form. Progressive massive fibrosis results from severe scarring and leads to the destruction of normal lung structures.

**Symptoms/Injuries After Skin Contact:** Concrete may cause dry skin, discomfort, irritation, severe burns, and dermatitis. Exposure of sufficient duration to wet concrete can cause serious, potentially irreversible damage to skin, eye, respiratory and digestive tracts due to chemical (caustic) burns, including third degree burns. A skin exposure may be hazardous even if there is no pain or discomfort. Unhardened concrete is capable of causing dermatitis by irritation and allergy. Skin affected by dermatitis may include symptoms such as, redness, itching, rash, scaling, and cracking. Irritant dermatitis is caused by the physical properties of concrete including alkalinity and abrasion. Allergic contact dermatitis is caused by sensitization to hexavalent chromium (chromate) potentially present in concrete. The reaction can range from a mild rash to severe skin ulcers. Persons already sensitized may react to the first contact with wet concrete. Others may develop allergic dermatitis after years of repeated contact with wet concrete. May cause an allergic skin reaction.

**Symptoms/Injuries After Eye Contact:** Potentially causes permanent damage to the cornea, iris, or conjunctiva. Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of dry powder or with wet cement can cause moderate eye irritation, chemical burns and blindness. Eye exposures require immediate first aid and medical attention to prevent significant damage to the eye.

**Symptoms/Injuries After Ingestion:** May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

**Chronic Symptoms:** May cause cancer.

## **Section 12: Ecological Information**

**General:** High pH (alkalinity) of product may be harmful to aquatic life.

## **Section 13: Disposal Considerations**

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, and international regulations.

**Additional Information:** Container may remain hazardous when empty. Continue to observe all precautions.

**Waste Materials (Ecological):** Avoid release to the environment.

## **Section 14: Transport Information**

Not regulated for transport.

## **Section 15: Regulatory Information**

**U.S. Federal Regulations:** Listed on the United States TSCA (Toxic Substances Control Act) inventory

**State Regulations:**

Massachusetts: Right To Know List

New Jersey: Right to Know Hazardous Substance List  
Pennsylvania: RTK (Right to Know) List

### **Section 16: Other Information**

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

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