



SAFETY DATA SHEET

Product: **MARC 221 JACKHAMMER CONCRETE PATCH**

Form R04132

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: **MARC 221 JACKHAMMER CONCRETE PATCH**

SDS DATE: 04/22/19

SUPPLIER: Mid-American Research Chemical Corp.

ADDRESS: P. O. Box 927 Columbus, NE 68602-0927

PHONE: 402-564-7104 FAX: 403-563-1290

EMERGENCY PHONE: InfoTrac 1-800-535-5053

E-MAIL: marc@marc1.com WEBSITE: www.marc1.com

RECOMMENDED USE: Concrete repair.

PREPARED BY: MARC

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION:

GHS-US CLASSIFICATION

Acute Toxicity 4 – Oral

Skin Corrosion 1A

Serious Eye Damage 1

Skin Sensitization 1

Carcinogenicity 1A

Specific Target Organ Toxicity After Single Exposure 3

Specific Target Organ Toxicity After Repeated Exposure 1



SIGNAL WORD AND PRECAUTIONARY STATEMENTS: DANGER: Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause cancer. May cause respiratory irritation. Causes damage to lungs through prolonged or repeated exposure.

PREVENTION STATEMENTS: Read label before use. Do not handle until all safety precautions have been read and understood. Keep out of reach of children. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wear protective gloves and clothing as well as eye and face protection. Remove contaminated work clothing. Use only outdoors or in a well-ventilated area. Do not breathe dust. Wear proper respirator, if needed, to avoid injury.

RESPONSE STATEMENTS: If swallowed, immediately call a poison center/doctor. Rinse mouth. **DO NOT INDUCE VOMITING.** If on skin or hair, immediately take off all contaminated clothing and wash before reuse. Rinse skin with water. If inhaled, remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell. If in eyes, immediately call a doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned, get medical attention.

STORAGE STATEMENTS: Store to keep product dry until use. Store to prevent dust generation.

DISPOSAL STATEMENTS: Dispose of contents and container in accordance with all local, state and federal regulations.

SUPPLEMENTAL INFORMATION: Read and follow all precautions listed in the Safety Data Sheet. This product contains greater than 0.1% crystalline silica. Crystalline silica has been linked to cancer, silicosis, and other lung problems in conditions of prolonged airborne over-exposure.

Keep product dry until use. Avoid contact with bleed water from wet product. Clothing saturated with wet product can result in delayed, serious alkali skin burns.

POTENTIAL HEALTH EFFECTS: See Section 11 for more information.



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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| INGREDIENT | CAS NO. | PER CENT |
|---|------------|-------------|
| QUARTZ | 14808-60-7 | 20% - 85% |
| CEMENT, PORTLAND, CHEMICALS | 65997-15-1 | 10% - 60% |
| MAGNESIUM OXIDE (MgO) | 1309-48-4 | 0.1% - 8% |
| LIMESTONE | 1317-65-3 | 0.1% - 7% |
| GYPSUM (Ca(SO ₄).2H ₂ O) | 13397-24-5 | 1% - 6% |
| CALCIUM OXIDE | 1305-78-8 | 0.1% - 2.5% |
| FLUE DUST, PORTLAND CEMENT | 68475-76-3 | 0.1% - 2% |

SECTION 4: FIRST AID MEASURES

EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

SKIN: Immediately flush skin with plenty of water. Remove contaminated clothing. Wash contaminated clothing before reuse. Get immediate medical advice/attention.

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 immediate medical advice/attention.

INHALATION: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE & DELAYED:

SYMPTOMS/INJURIES AFTER EYE CONTACT: Causes serious eye damage. May cause burns. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

SYMPTOMS/INJURIES AFTER SKIN CONTACT: Causes severe skin burns. Symptoms may include redness, pain, blisters. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. May cause sensitization by skin contact.

SYMPTOMS/INJURIES AFTER INGESTION: Harmful if swallowed. May cause stomach distress, nausea or vomiting.

SYMPTOMS/INJURIES AFTER INHALATION: May cause respiratory tract irritation.

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 immediately (show the label or SDS where possible).

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Treat for surrounding material.

SPECIAL FIRE FIGHTING PROCEDURES: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS: Product does not burn, however its packaging may.

HAZARDOUS DECOMPOSITION PRODUCTS: Products of combustion may include, and are not limited to: oxides of carbon.



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SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS/PROTECTIVE

EQUIPMENT/EMERGENCY PROCEDURES: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Avoid contact with skin and eyes.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Contain spill, then place in a suitable container. 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 OTHER SECTIONS: No additional information available.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE

HANDLING: Avoid contact with skin and eyes. Avoid generating and breathing dust. Do not swallow. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc., is not recommended. Handle and open container with care.

HYGIENE MEASURES: When using do not eat, drink or smoke. Launder contaminated clothing before reuse. Wash hands before eating, drinking or smoking.

CONDITIONS FOR SAFE STORAGE,

INCLUDING ANY INCOMPATIBILITIES: STORAGE CONDITIONS: Store to keep product dry until use. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Store to prevent dust generation. Do not store in an area equipped with emergency water sprinklers. Clean up spilled material promptly.

OTHER PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN! CAREFULLY READ ENTIRE LABEL BEFORE USE!

SPECIFIC END USE(S): No additional information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| QUARTZ (14808-60-7) | | |
|----------------------------|------------------------|--|
| USA ACGIH | ACGIH TWA (mg/m3) | 0.025 mg/n3 (respirable fraction) |
| USA OSHA | OSHA PEL (TWA) (mg/m3) | (30)/(%SiO ₂ + 2) mg/m3 total dust, (250)/(%SiO ₂ + 5) mppcf respirable fraction, (10)/(%SiO ₂ + 2) mg/m3 respirable fraction |

| CEMENT, PORTLAND, CHEMICALS (65997-15-1) | | |
|---|------------------------|---|
| USA ACGIH | ACGIH TWA (mg/m3) | 1 mg/m3 (respirable fraction) |
| USA OSHA | OSHA PEL (TWA) (mg/m3) | 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction) |

| MAGNESIUM OXIDE (MgO) (1309-48-4) | | |
|--|------------------------|---|
| USA ACGIH | ACGIH TWA (mg/m3) | 0.025 mg/n3 (respirable fraction) |
| USA OSHA | OSHA PEL (TWA) (mg/m3) | 10 mg/m3 (inhalable fraction) 15 mg/m3 (fume, total particulate) |



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| LIMESTONE (1317-65-3) | | |
|--|------------------------|---|
| USA OSHA | OSHA PEL (TWA) (mg/m3) | 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction) |
| GYPSUM (Ca(SO4).2H2O)(13397-24-5) | | |
| USA ACGIH | ACGIH TWA (mg/m3) | 10 mg/m3 (inhalable fraction) |
| USA OSHA | OSHA PEL (TWA) (mg/m3) | 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction) |
| CALCIUM OXIDE (1305-78-8) | | |
| USA ACGIH | ACGIH TWA (mg/m3) | 2 mg/m3 |
| USA OSHA | OSHA PEL (TWA) (mg/m3) | 15 mg/m3 (total dust), 5 mg/m3 |
| FLUE DUST, PORTLAND CEMENT (68475-76-3) | | |
| USA ACGIH | ACGIH TWA (mg/m3) | 10 mg/m3 (as inhalable fraction, PNOS); 3 mg/m3 (as respirable fraction, PNOS) |
| USA OSHA | OSHA PEL (TWA) (mg/m3) | 15 mg/m3 (as total dust, PNOR),, 5 mg/m3 (as respirable fraction, PNOR) |

APPROPRIATE ENGINEERING CONTROLS:

VENTILATION: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

RESPIRATORY PROTECTION: A NIOSH approved dust mask or filtering face piece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

EYE PROTECTION: Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).

SKIN PROTECTION/PROTECTIVE GLOVES: Wear suitable gloves.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear suitable clothing common to do-it-yourself projects.

ENVIRONMENTAL EXPOSURE CONTROLS: Maintain levels below Community environmental protection thresholds.

WORK HYGIENIC PRACTICES: Handle according to established industrial hygiene and safety practices. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|-------------------------------------|
| APPEARANCE: | Sandy powder to Granular Material. |
| PHYSICAL STATE: | Solid. |
| COLOR: | Various. |
| ODOR: | No odor. |
| ODOR THRESHOLD: | No data available. |
| pH: | 10 – 12 (Highly alkaline when wet.) |
| RELATIVE EVAPORATION RATE (BUTYLACETATE=1): | No data available. |
| MELTING/FREEZING POINT: | No data available. |
| BOILING POINT: | Not applicable. |



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| | |
|--------------------------------|--------------------|
| FLASH POINT/METHOD USED: | Not applicable. |
| SELF IGNITION TEMPERATURE: | No data available. |
| DECOMPOSITION TEMPERATURE : | No data available. |
| FLAMMABILITY (solid, gas): | Not flammable. |
| VAPOR PRESSURE (mmHg): | No data available. |
| RELATIVE VAPOR DENSITY @ 20°C: | No data available. |
| RELATIVE DENSITY: | 2.8 |
| SOLUBILITY IN WATER: | No data available. |
| LOG POW: | No data available. |
| LOG KOW: | No data available. |
| VISCOSITY, KINEMATIC: | Not applicable. |
| VISCOSITY, DYNAMIC: | Not applicable. |
| EXPLOSIVE PROPERTIES: | No data available. |
| OXIDISING PROPERTIES: | No data available. |
| EXPLOSIVE LIMITS: | No data available. |
| VOC CONTENT: | No data available. |

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: No dangerous reaction known under conditions of normal use. An alkali reaction from components of Portland cement will corrode aluminum.

CHEMICAL STABILITY: Stable under normal storage conditions. Keep dry in storage.

CONDITIONS TO AVOID: Moisture – product must be kept dry until ready to use.

INCOMPATIBILITY (MATERIAL TO AVOID)/

POSSIBILITY OF HAZARDOUS REACTIONS: Strong acids may; cause violent, exothermic reaction, evolve toxic gases. Do not mix with other chemicals.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None known.

HAZARDOUS POLYMERIZATION: N/A **CONDITIONS TO AVOID (POLYMERIZATION):** NA

SECTION 11: TOXICOLOGICAL INFORMATION

| REPAIR & CONSTRUCTION RELATED PRODUCTS | |
|--|--------------------|
| LD50 ORAL RAT | 507 – 1020 mg/kg |
| LD50 DERMAL RABBIT | No data available. |
| LD50 INHALATION RAT | No data available. |
| QUARTZ (14808-60-7) | |
| LD50 ORAL RAT | 500 mg/kg |
| MAGNESIUM OXIDE (MgO) (1309-48-4) | |
| LD50 ORAL RAT | >5000 mg/kg |
| LIMESTONE (13117-65-3) | |
| LD50 ORAL RAT | 6450 mg/kg |
| CALCIUM OXIDE (1305-78-8) | |
| LD50 ORAL RAT | >2000 mg/kg |



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- SKIN CORROSION/IRRITATION:** Causes severe skin burns.
- SERIOUS EYE DAMAGE/IRRITATION:** Causes serious eye damage.
- RESPIRATORY OR SKIN SENSITISATION:** May cause an allergic skin reaction.
- GERM CELL MUTAGENICITY:** Based on available data, the classification criteria are not met.
- CARCINOGENICITY:** May cause cancer.

| | |
|--|-----------------------------|
| QUARTZ (14808-60-7) | |
| IARC GROUP | 1 – Carcinogenic to humans |
| NATIONAL TOXICITY PROGRAM (NTP Status) | 2 – Known Human Carcinogens |

REPRODUCTIVE TOXICITY: Based on available data, the classification criteria are not met.

SPECIFIC TARGET ORGAN TOXICITY

(REPEATED EXPOSURE): Causes damage to lungs through prolonged or repeated exposure. (Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.)

ASPIRATION HAZARD: Based on available data, the classification criteria are not met.

SYMPTOMS/INJURIES AFTER INHALATION: May cause respiratory tract irritation.

SYMPTOMS/INJURIES AFTER SKIN CONTACT: Causes severe skin burns. Symptoms may include redness, pain, blisters. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. May cause sensitization by skin contact.

SYMPTOMS/INJURIES AFTER EYE CONTACT: Causes serious eye damage. May cause burns. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

SYMPTOMS/INJURIES AFTER INGESTION: 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: No ecological consideration when used according to directions. Do not flush to sewer or allow to enter waterways.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: This material must be disposed of in accordance with all local, state, provincial, and federal regulations.



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SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (for ground/non-bulk containers)

CONTAINER SIZES(S): Bag.
 PROPER SHIPPING NAME: Bagged Portland Cement
 HAZARD CLASS: Non-hazardous.
 ID NUMBER: NA
 PACKING GROUP: NA
 LABEL STATEMENT: NA

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): 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:

GYPSUM (Ca(SO4).2H2O

CAS NO. 13397-24-5

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): NA

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): NA

311/312 HAZARD CATEGORIES: NA

313 REPORTABLE INGREDIENTS: NA

SECTION 16: OTHER INFORMATION

HMIS/NFPA Ratings: Health = 3
 Flammability = 0
 Reactivity = 0
 Other = -
 Protection = -

REVISION DATE: 04/22/19

N/A = Not Applicable, N/D = Not Determined, N/E = Not Established

DISCLAIMER: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.