# SAFETY DATA SHEET

## 1. Identification

**Product identifier** **Metal Casting Plaster 278**

**Product list** Metal Casting Plaster BR-278

**Other means of identification**

**SDS number** GP-41H

**Recommended use** Industrial plaster.

**Recommended restrictions** Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

**Manufacturer/Importer/Supplier/Distributor information**

**Company name** GP Industrial Plasters LLC

**Address** 100 Peachtree Street, NW
Atlanta, GA 30303

**Telephone** Technical Information 800.225.6119
(M)SDS Request 404.652.5119

**E-mail** MSDSREQ@GAPAC.COM

**Emergency phone number** Chemtrec - Emergency 800.424.9300

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards**

| | |
|---|---|
| Acute toxicity, oral | Category 4 |
| Eye irritation | Category 2B |
| Sensitization, skin | Category 1 |
| Carcinogenicity | Category 1A |
| Specific target organ toxicity, repeated exposure | Category 1 (lung) |

**Environmental hazards**

| | |
|---|---|
| Hazardous to the aquatic environment, acute hazard | Category 3 |

**OSHA defined hazards** Not classified.

**Label elements**

**Signal word** Danger

**Hazard statement** Harmful if swallowed. May cause an allergic skin reaction. Causes eye irritation. May cause cancer. Causes damage to organs (lung) through prolonged or repeated exposure. Harmful to aquatic life.

**Precautionary statement**

**Prevention** 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. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment. After mixing with water, do not allow prolonged contact with skin until the product has completely hardened and cooled.

**Response** If swallowed: Rinse mouth. Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. If exposed or concerned: Get medical advice/attention. Specific treatment (see section 4 on the SDS).

| | |
|---|---|
| **Storage** | Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS). Protect from moisture. |
| **Disposal** | Dispose of contents/container in accordance with applicable regulations. |
| **Hazard(s) not otherwise classified (HNOC)** | Heat develops as product hardens. May cause serious burns during hardening (rehydration) resulting in possible permanent injury. |
| **Supplemental information** | None. |

## 3. Composition/information on ingredients

**Mixtures**

| Chemical name | Common name and synonyms | CAS number | % |
|---|---|---|---|
| CALCIUM SULFATE HEMIHYDRATE | | 10034-76-1 | 60 - 80 |
| WOLLASTONITE | | 13983-17-0 | 10 - 30 |
| DIATOMACEOUS EARTH | | 61790-53-2 | 5 - 10 |
| Sand (crystalline silica) | | 14808-60-7 | 3 - 7 |
| PORTLAND CEMENT | | 65997-15-1 | 0.1 - 1 |
| ZIRAM | | 137-30-4 | 0 - 0.1 |
| Other components below reportable levels | | | 0.1 - 1 |

The specific chemical identity and/or percentage of composition has been withheld as a trade secret.

| | |
|---|---|
| **Composition comments** | Gypsum (calcium sulfate), diatomaceous earth and Portland Cement contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information. |

## 4. First-aid measures

| | |
|---|---|
| **Inhalation** | Move to fresh air. Call a physician if symptoms develop or persist. |
| **Skin contact** | Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. |
| **Eye contact** | Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. |
| **Ingestion** | Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. May result in obstruction and irritation if ingested. Get medical attention. |
| **Most important symptoms/effects, acute and delayed** | Causes eye irritation. Exposed individuals may experience eye tearing, redness, and discomfort. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Discomfort in the chest. Shortness of breath. May cause an allergic skin reaction. Dermatitis. Rash. Skin contact during hardening (rehydration) may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. Prolonged exposure may cause chronic effects. |
| **Indication of immediate medical attention and special treatment needed** | Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed. |
| **General information** | IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse. |

## 5. Fire-fighting measures

| | |
|---|---|
| **Suitable extinguishing media** | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| **Unsuitable extinguishing media** | None known. |
| **Specific hazards arising from the chemical** | During fire, gases hazardous to health may be formed. |
| **Special protective equipment and precautions for firefighters** | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| **Fire fighting equipment/instructions** | Firefighters should wear full protective clothing including self contained breathing apparatus. Use water spray to cool unopened containers. |
| **Specific methods** | Use standard firefighting procedures and consider the hazards of other involved materials. |

**General fire hazards** No unusual fire or explosion hazards noted.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

**Methods and materials for containment and cleaning up** Sweep up or gather material and place in appropriate container for disposal. Minimize dust generation and accumulation. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Contain the spill, then place in a suitable container. For waste disposal, see section 13 of the SDS. Prevent entry into waterways, sewer, basements or confined areas.

**Environmental precautions** Avoid discharge into drains, water courses or onto the ground. If large quantities enter a waterway, advise local authorities.

## 7. Handling and storage

**Precautions for safe handling** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store in a dry place. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep away from food, drink and animal feedingstuffs.

## 8. Exposure controls/personal protection

**Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components | Type | Value | Form |
|---|---|---|---|
| CALCIUM SULFATE HEMIHYDRATE (CAS 10034-76-1) | PEL | 5 mg/m3 | Respirable fraction. |
| | | 15 mg/m3 | Total dust. |
| PORTLAND CEMENT (CAS 65997-15-1) | PEL | 5 mg/m3 | Respirable fraction. |
| | | 15 mg/m3 | Total dust. |
| Sand (crystalline silica) (CAS 14808-60-7) | PEL | 0.05 mg/m3 | Respirable dust. |

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

| Components | Type | Value |
|---|---|---|
| DIATOMACEOUS EARTH (CAS 61790-53-2) | TWA | 0.86 mg/m3 |

**US. ACGIH Threshold Limit Values**

| Components | Type | Value | Form |
|---|---|---|---|
| CALCIUM SULFATE HEMIHYDRATE (CAS 10034-76-1) | TWA | 10 mg/m3 | Inhalable fraction. |
| PORTLAND CEMENT (CAS 65997-15-1) | TWA | 1 mg/m3 | Respirable fraction. |
| Sand (crystalline silica) (CAS 14808-60-7) | TWA | 0.025 mg/m3 | Respirable fraction. |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components | Type | Value | Form |
|---|---|---|---|
| DIATOMACEOUS EARTH (CAS 61790-53-2) | TWA | 6 mg/m3 | |
| PORTLAND CEMENT (CAS 65997-15-1) | TWA | 5 mg/m3 | Respirable. |
| | | 10 mg/m3 | Total |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components | Type | Value | Form |
|---|---|---|---|
| Sand (crystalline silica) (CAS 14808-60-7) | TWA | 0.05 mg/m3 | Respirable dust. |

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Exposure guidelines** Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

Exposure limits for Amorphous, including natural diatomaceous earth - The US OSHA exposure limits 8 hour TWA for Amorphous, including natural diatomaceous earth is calculated from the following equations: 80/(%SiO2) mg/m3.

**Appropriate engineering controls** When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles). Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Safety shower/eye wash fountain must be readily available in the workplace area (29 CFR 1910.151(c)).

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).

**Respiratory protection** A NIOSH approved dust mask or filtering facepiece 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).

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** Observe any medical surveillance requirements. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

**Appearance** Powder

**Physical state** Solid.

**Form** Powder.

**Color** Light grey to white

**Odor** Low odor

**Odor threshold** Not available.

**pH** 8 - 10

**Melting point/freezing point** 2684.58 °F (1473.65 °C) estimated

**Initial boiling point and boiling range** Not applicable

**Flash point** Not applicable

**Evaporation rate** Not available

**Flammability (solid, gas)** Not available.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** Not applicable

**Flammability limit - upper (%)** Not applicable

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** Not applicable

| | |
|---|---|
| **Vapor density** | Not applicable |
| **Relative density** | 2.5 g/cm3 |
| **Solubility(ies)** | |
| **Solubility (water)** | 0.2 % @ 22°C |
| **Partition coefficient (n-octanol/water)** | Not available. |
| **Auto-ignition temperature** | Not applicable |
| **Decomposition temperature** | Not available. |
| **Viscosity** | Not available. |
| **Other information** | |
| **Explosive properties** | Not explosive. |
| **Flash point class** | Not flammable |
| **Oxidizing properties** | Not oxidizing. |
| **Specific gravity** | 2.5 |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | Reacts with water (normal condition of use). |
| **Chemical stability** | Stable at normal conditions. |
| **Possibility of hazardous reactions** | No dangerous reaction known under conditions of normal use. |
| **Conditions to avoid** | Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Contact with incompatible materials. Exposure to moisture. |
| **Incompatible materials** | Acids. |
| **Hazardous decomposition products** | May include and are not limited to: calcium oxide and sulfur dioxide. |

## 11. Toxicological information

**Information on likely routes of exposure**

| | |
|---|---|
| **Inhalation** | May cause damage to organs through prolonged or repeated exposure by inhalation. Dust may irritate respiratory system. |
| **Skin contact** | Dust or powder may irritate the skin. May cause an allergic skin reaction. Skin contact during hardening (rehydration) may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. |
| **Eye contact** | Causes eye irritation. |
| **Ingestion** | Harmful if swallowed. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | Causes eye irritation. Exposed individuals may experience eye tearing, redness, and discomfort. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Discomfort in the chest. Shortness of breath. May cause an allergic skin reaction. Dermatitis. Rash. Skin contact during hardening (rehydration) may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. |

**Information on toxicological effects**

**Acute toxicity** Harmful if swallowed.

| **Product** | **Species** | **Test Results** |
|---|---|---|
| Metal Casting Plaster 278 | | |
| **Acute** | | |
| **Oral** | | |
| LD50 | Rat | 1780 mg/kg estimated |
| **Components** | **Species** | **Test Results** |
| CALCIUM SULFATE HEMIHYDRATE (CAS 10034-76-1) | | |
| **Acute** | | |
| **Oral** | | |
| LD50 | Rat | > 1581 mg/kg |

| Components | Species | Test Results |
|---|---|---|
| Sand (crystalline silica) (CAS 14808-60-7) | | |
| **Acute** | | |
| **Oral** | | |
| LD50 | Rat | 500 mg/kg |
| ZIRAM (CAS 137-30-4) | | |
| **Acute** | | |
| **Dermal** | | |
| LD50 | Rabbit | 2000.1 mg/kg |
| **Inhalation** | | |
| LC50 | Rat | 81 mg/l/4h |
| **Oral** | | |
| LD50 | Rat | 320 mg/kg |

* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Skin contact during hardening (rehydration) may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.

**Serious eye damage/eye irritation** Causes eye irritation.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** May cause an allergic skin reaction.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and 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 a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

| | |
|---|---|
| DIATOMACEOUS EARTH (CAS 61790-53-2) | 3 Not classifiable as to carcinogenicity to humans. |
| Sand (crystalline silica) (CAS 14808-60-7) | 1 Carcinogenic to humans. |
| WOLLASTONITE (CAS 13983-17-0) | 3 Not classifiable as to carcinogenicity to humans. |
| ZIRAM (CAS 137-30-4) | 3 Not classifiable as to carcinogenicity to humans. |

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

| | |
|---|---|
| Sand (crystalline silica) (CAS 14808-60-7) | Cancer |

**US. National Toxicology Program (NTP) Report on Carcinogens**

| | |
|---|---|
| Sand (crystalline silica) (CAS 14808-60-7) | Known To Be Human Carcinogen. |

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Causes damage to organs (lung) through prolonged or repeated exposure.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

**Ecotoxicity** Harmful to aquatic life.

| Components | Species | Test Results |
|---|---|---|
| CALCIUM SULFATE HEMIHYDRATE (CAS 10034-76-1) | | |
| **Aquatic** | | |
| Fish | LC50 | Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours |

| Components | | Species | Test Results |
|---|---|---|---|
| ZIRAM (CAS 137-30-4) | | | |
| **Aquatic** | | | |
| *Acute* | | | |
| Fish | LC50 | Fish | 0.0097 - 1.7 mg/l, 96 hours |
| *Chronic* | | | |
| Fish | NOEC | Fish | 0.101 - 0.222 mg/l, 33 days |

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

| | |
|---|---|
| ZIRAM | 1.23 |

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**US RCRA Hazardous Waste P List: Reference**

| | |
|---|---|
| ZIRAM (CAS 137-30-4) | P205 |

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

**DOT**

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

| | |
|---|---|
| ZIRAM (CAS 137-30-4) | Listed. |

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

| | |
|---|---|
| Sand (crystalline silica) (CAS 14808-60-7) | Cancer<br>lung effects<br>immune system effects<br>kidney effects |

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

| | |
|---|---|
| **Classified hazard categories** | Acute toxicity (any route of exposure)<br>Serious eye damage or eye irritation<br>Respiratory or skin sensitization<br>Carcinogenicity<br>Specific target organ toxicity (single or repeated exposure) |

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations**

**California Proposition 65**

**WARNING:** This product can expose you to chemicals including CRYSTALLINE SILICA (QUARTZ), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Sand (crystalline silica) (CAS 14808-60-7) Listed: October 1, 1988

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Sand (crystalline silica) (CAS 14808-60-7)

**International Inventories**

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Canada | Domestic Substances List (DSL) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

| | |
|---|---|
| **Issue date** | March-04-2015 |
| **Revision date** | August-22-2018 |
| **Version #** | 05 |
| **HMIS® ratings** | Health: 2*<br>Flammability: 0<br>Physical hazard: 1 |
| **NFPA ratings** | Health: 2<br>Flammability: 0<br>Instability: 0 |
| **Disclaimer** | This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete. |

**Revision information**

Identification: Recommended restrictions
Hazard(s) identification: Hazard statement
Toxicological Information: Toxicological Data
Ecological information: Ecotoxicity
Transport information: General information
Regulatory information: California Proposition 65
Regulatory information: US federal regulations
GHS: Classification