

SAFETY DATA SHEET

1. Identification

Product identifier	Metal Casting Plasters 280, 475	
Product list	Metal Casting Plaster 475 BR-475 Metal Casting Plaster 280 BR-280	
Other means of identification		
SDS number	GP-41E	
Recommended use	Industrial plasters.	
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		
Manufacturer		
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	
Importer/Supplier/Distributor	Not applicable.	

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 following repeated exposure	Category 1 (lung)
	Health hazards not otherwise classified	Category 1
Environmental 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. Heat develops as product hardens. May cause serious burns during hardening (rehydration) resulting in possible permanent injury.

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 should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. 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. Take off contaminated clothing and wash it 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.

Other hazards

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Calcium sulfate hemihydrate		10034-76-1	70 - 80
SILICA, AMORPHOUS, FUMED		68855-54-9	10 - 20
Wollastonite		13983-17-0	1 - 3
Crystalline silica (quartz)		14808-60-7	0.1 - 1
Portland Cement		65997-15-1	< 1

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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. Get medical advice/attention if you feel unwell.

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. 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. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Sweep up or gather material and place in appropriate container for disposal. Minimise 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. Minimise 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 feeding stuffs.

8. Exposure controls/personal protection

Occupational exposure limits

US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m³, non-standard units

Components	Type	Value	Form
Calcium sulfate hemihydrate (CAS 10034-76-1)	TWA	10 mg/m ³	Inhalable fraction.
Crystalline silica (quartz) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.
Portland Cement (CAS 65997-15-1)	TWA	1 mg/m ³	Respirable fraction.

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Crystalline silica (quartz) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable particles.
Portland Cement (CAS 65997-15-1)	TWA	10 mg/m ³	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Calcium sulfate hemihydrate (CAS 10034-76-1)	STEL	20 mg/m ³	Total dust.
Crystalline silica (quartz) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.
Portland Cement (CAS 65997-15-1)	TWA	3 mg/m ³	Respirable fraction.
SILICA, AMORPHOUS, FUMED (CAS 68855-54-9)	TWA	10 mg/m ³	Total dust.
		4 mg/m ³	Total
		1.5 mg/m ³	Respirable.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Calcium sulfate hemihydrate (CAS 10034-76-1)	TWA	10 mg/m ³	Inhalable fraction.
Crystalline silica (quartz) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.
Portland Cement (CAS 65997-15-1)	TWA	1 mg/m ³	Respirable fraction.

Canada. Ontario OELs. (Ministry of Labor - Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Calcium sulfate hemihydrate (CAS 10034-76-1)	TWA	10 mg/m ³	Inhalable fraction.
Crystalline silica (quartz) (CAS 14808-60-7)	TWA	0.1 mg/m ³	Respirable fraction.
Portland Cement (CAS 65997-15-1)	TWA	1 mg/m ³	Respirable fraction.

Canada. Quebec OELs. (Ministry of Labour - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
Crystalline silica (quartz) (CAS 14808-60-7)	TWA	0.1 mg/m ³	Respirable dust.
Portland Cement (CAS 65997-15-1)	TWA	5 mg/m ³	Respirable dust.
		10 mg/m ³	Total dust.
SILICA, AMORPHOUS, FUMED (CAS 68855-54-9)	TWA	6 mg/m ³	Total dust.
Wollastonite (CAS 13983-17-0)	TWA	10 mg/m ³	Fiber.

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.

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). Eye wash facilities and emergency shower must be available when handling this product.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves.

Other

Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Safety shower/eye wash fountain is recommended in the workplace area.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

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.
Colour	Light grey to white
Odour	Low odor
Odour threshold	Not available.
pH	8 - 11
Melting point/freezing point	1491.25 °C (2716.25 °F) 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.
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	2 - 2.5 g/cm ³
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
Oxidising properties	Not oxidising.
Specific gravity	2 - 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 Plasters 280, 475		
Acute		
Oral		
LD50	Rat	1949 mg/kg estimated
Components	Species	Test results
Calcium sulfate hemihydrate (CAS 10034-76-1)		
Acute		
Oral		
LD50	Rat	> 1581 mg/kg
SILICA, AMORPHOUS, FUMED (CAS 68855-54-9)		
Acute		
Oral		
LD50	Mouse	> 15000 mg/kg
	Rat	> 22500 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 sensitisation

Respiratory sensitisation Not a respiratory sensitizer.

Skin sensitisation 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

ACGIH Carcinogens

Crystalline silica (quartz) (CAS 14808-60-7)
Portland Cement (CAS 65997-15-1)

A2 Suspected human carcinogen.
A4 Not classifiable as a human carcinogen.

Canada - Alberta OELs: Carcinogen category

Crystalline silica (quartz) (CAS 14808-60-7)

Suspected human carcinogen.

Canada - Manitoba OELs: carcinogenicity

Crystalline silica (quartz) (CAS 14808-60-7)
Portland Cement (CAS 65997-15-1)

Suspected human carcinogen.
Not classifiable as a human carcinogen.

Canada - Quebec OELs: Carcinogen category

Crystalline silica (quartz) (CAS 14808-60-7)

Suspected carcinogenic effect in humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline silica (quartz) (CAS 14808-60-7)
SILICA, AMORPHOUS, FUMED (CAS 68855-54-9)
Wollastonite (CAS 13983-17-0)

1 Carcinogenic to humans.
3 Not classifiable as to carcinogenicity to humans.
3 Not classifiable as to carcinogenicity to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Crystalline silica (quartz) (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

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components

Species

Test results

Calcium sulfate hemihydrate (CAS 10034-76-1)

Aquatic

Fish

LC50

Fathead minnow (*Pimephales promelas*)

> 1970 mg/l, 96 hours

Crystalline silica (quartz) (CAS 14808-60-7)

Aquatic

Acute

Fish

LC50

Zebra danio (*Danio rerio*)

> 10000 mg/l, 96 Hours OECD SIDS

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

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

Dispose of contents/container in accordance with local/regional/national/international regulations.

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.

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

TDG

Not regulated as dangerous goods.

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

General information IMDG Regulated Marine Pollutant.

15. Regulatory information

Canadian regulations

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Calcium sulfate hemihydrate (CAS 10034-76-1)

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

Issue date 02-28-2017

Revision date 10-04-2017

Version No. 02

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

Product and Company Identification: Product and Company Identification
Composition / Information on Ingredients: Disclosure Overrides
Accidental release measures: Methods and materials for containment and cleaning up
Handling and storage: Conditions for safe storage, including any incompatibilities