



SAFETY DATA SHEET Fortiseal

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name Fortiseal PMP
Recommended Use Adhesive Sealant

Recommended use of the chemical and restrictions on use

Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Manufacturer FortiSystems
16601 Central Greens
Blvd. Ste. 100
Houston, TX 77032
(833) 840-2777

Emergency telephone number

Emergency telephone (833) 840-2777

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified
Health hazards Eye Irrit. 2A - H319 Skin Sens. 1 - H317 Repr. 1B - H360

Disclaimer WARNING! This product contains chemicals known to the State of California to cause cancer. The listing of titanium dioxide and quartz (crystalline silica) is for "airborne, unbound particles of respirable size." The listing is not applicable to titanium dioxide or quartz when they remain bound within a product matrix. Additives in this product do not present a respiration hazard unless the product is ground to a powder of respirable size and the dust is inhaled. All dusts are potentially injurious to the respiratory tract if respirable particles are generated and inhaled.

Label elements

Pictogram



Signal word Danger

Hazard statements H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H360 May damage fertility or the unborn child.

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Precautionary statements

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P261 Avoid breathing vapor/ spray.
 P264 Wash contaminated skin thoroughly after handling.
 P272 Contaminated work clothing must not be allowed out of the workplace.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P302+P352 If on skin: Wash with plenty of water.
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 If exposed or concerned: Get medical advice/ attention.
 P321 Specific treatment (see medical advice on this label).
 P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P405 Store locked up.
 P501 Dispose of contents/ container in accordance with national regulations.

Contains

Proprietary Catalyst

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

Proprietary Polymer CAS number: Proprietary	30-60%
Limestone CAS number: 1317-65-3	30-60%
Titanium Dioxide CAS number: 13463-67-7	1-5%
Proprietary Dehydration Agent CAS number: Proprietary	1-5%
Proprietary Catalyst CAS number: 22673-19-4	<1%
Crystalline Silica CAS number: 14808-60-7	<1%
Amorphous Silica CAS number: 7631-86-9	<1%

Composition comments

Exact concentrations and chemical identities of ingredients not listed above are either classified as non-hazardous or are withheld as a trade secret as covered by OSHA's Hazard Communication Standard, 29 CFR 1910.1200(i).

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4. First-aid measures

Description of first aid measures

General information	Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.
Ingestion	Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.
Skin Contact	Rinse with water.
Eye contact	Rinse with water. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Get medical attention if any discomfort continues.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged or repeated exposure may cause the following adverse effects: May cause cancer.
Ingestion	Prolonged or repeated exposure may cause the following adverse effects: May cause cancer.
Skin contact	Prolonged or repeated exposure may cause the following adverse effects: May cause cancer.
Eye contact	Irritating to eyes.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards	Containers can burst or explode when heated, due to excessive pressure build up
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapors. Evacuate area. Keep upwind to avoid inhalation of gases, vapors, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
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Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.
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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material.
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Environmental precautions

Environmental precautions	Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.
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Methods and material for containment and cleaning up

Methods for cleaning up	Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.
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Reference to other sections	For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.
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7. Handling and storage

Precautions for safe handling

Usage precautions	Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists. May cause cancer. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.
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Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.
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Conditions for safe storage, including any incompatibilities

Storage precautions	Store away from incompatible materials (see Section 10). Store locked up. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.
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Storage class	Miscellaneous hazardous material storage.
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Specific end uses(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.
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8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

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Proprietary Polymer

Long-term exposure limit (8-hour TWA): ACGIH 50 ppm

Long-term exposure limit (8-hour TWA): OSHA 500 ppm 1800 mg/m³

Limestone

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ respirable fraction

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ respirable fraction

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ respirable fraction

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ total dust

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ total dust

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ total dust

Titanium Dioxide

Long-term exposure limit (8-hour TWA): ACGIH 10 mg/m³

A4

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ total dust

Proprietary Catalyst

Long-term exposure limit (8-hour TWA): ACGIH 0.1 mg/m³

Short-term exposure limit (15-minute): ACGIH 0.2 mg/m³

Long-term exposure limit (8-hour TWA): OSHA 0.1 mg/m³

Crystalline Silica

Long-term exposure limit (8-hour TWA): OSHA 0.05 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): ACGIH 0.025 mg/m³ respirable fraction

A2

ACGIH = American Conference of Governmental Industrial Hygienists.

OSHA = Occupational Safety and Health Administration.

A4 = Not Classifiable as a Human Carcinogen.

A2 = Suspected Human Carcinogen.

Proprietary Polymer

Immediate danger to life and health 1100 ppm

Titanium Dioxide (CAS: 13463-67-7)

Immediate danger to life and health 5000 mg/m³

Crystalline Silica (CAS: 14808-60-7)

Immediate danger to life and health 25 mg/m³ 50 mg/m³

Amorphous Silica (CAS: 7631-86-9)

Immediate danger to life and health 3000 mg/m³

Exposure controls

Protective equipment



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Appropriate engineering controls	Provide adequate general and local exhaust ventilation. Ensure the ventilation system is regularly maintained and tested. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients.
Eye/face protection	Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Hand protection	Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.
Respiratory protection	Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.
Environmental exposure controls	Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Paste.
Odor	Characteristic.
Odor threshold	Not applicable.
pH	Not applicable.
Melting point	Not applicable.
Initial boiling point and range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Evaporation factor	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.

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Relative density	Not applicable.
Bulk density	Not applicable.
Solubility(ies)	Not applicable.
Partition coefficient	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable.
Viscosity	Contact the manufacturer
VOC's	

10. Stability and reactivity

Reactivity	See the other subsections of this section for further details.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	No potentially hazardous reactions known.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

ATE inhalation (vapours mg/l) 1,100.0

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitization

Respiratory sensitization Based on available data the classification criteria are not met.

Skin sensitization

Skin sensitization Based on available data the classification criteria are not met.

Germ cell mutagenicity

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Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Contains a substance which may cause cancer by inhalation.
IARC carcinogenicity	Contains a substance/a group of substances which may cause cancer. IARC Group 1 Carcinogenic to humans.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Based on available data the classification criteria are not met.
General information	May cause cancer after repeated exposure. Risk of cancer depends on duration and level of exposure. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known.
Ingestion	No specific symptoms known.
Skin Contact	No specific symptoms known.
Eye contact	Irritating to eyes.
Route of entry	Ingestion Inhalation Skin and/or eye contact
Target Organs	No specific target organs known.

12. Ecological Information

Toxicity Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient Not applicable.

Mobility in soil

Mobility No data available.

Other adverse effects

Other adverse effects None known.

13. Disposal considerations

Waste treatment methods

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General information

The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods

Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

14. Transport information

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The following ingredients are listed or exempt:

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

SARA 313 Emission Reporting

The following ingredients are listed or exempt:

CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

FDA - Essential Chemical

None of the ingredients are listed or exempt.

FDA - Precursor Chemical

None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

Titanium Dioxide

Known to the State of California to cause cancer.

Crystalline Silica

California Air Toxics "Hot Spots" (A-I)

The following ingredients are listed or exempt:

Amorphous Silica

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California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances

The following ingredients are listed or exempt:

Amorphous Silica

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

Zirconium Dioxide

Amorphous Silica

Titanium Dioxide

Limestone

Crystalline Silica

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

Titanium Dioxide

Limestone

Crystalline Silica

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

Amorphous Silica

Titanium Dioxide

Limestone

Crystalline Silica

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

Potassium Superoxide

Titanium Dioxide

Limestone

Crystalline Silica

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

Amorphous Silica

Titanium Dioxide

Limestone

Crystalline Silica

Inventories

US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

16. Other information

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Classification abbreviations and acronyms	Carc. = Carcinogenicity Eye Irrit. = Eye irritation Aquatic Chronic = Hazardous to the aquatic environment (chronic)
Training advice	Only trained personnel should use this material.
Revision comments	Revised due to new SDS software implementation
Issued by	FortiSystems 16601 Central Greens Blvd. Ste. 100 Houston, TX 77032 (833) 840-2777 7/11/2018
Revision date	1
Revision	4701
SDS No.	H317 May cause an allergic skin reaction.
Hazard statements in full	H319 Causes serious eye irritation.
	H360 May damage fertility or the unborn child.

End of Safety Data Sheet