

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Generic Description: Silicone Compound PCI-Promatec
Physical Form: Viscous Liquid 11707 West Sam Houston Parkway South
Color: Light Gray* Suite K
Odor: Some odor Houston, TX 77031
281-933-7222

* After combining of separate components

SECTION 2. OSHA HAZARDOUS COMPONENTS

<u>CAS number</u>	<u>Wt %</u>	<u>Component Name</u>
68037-59-2	<3%	Dimethyl, methylhydrogen siloxane
7439-89-6	10%-15%	Iron
7727-43-7	45%-55%	Barium Sulfate ¹

¹The amount of respirable silica is less than 0.1% at 10 microns.

NFPA Profile: Health: 0 Flammability 1 Instability/Reactivity 0

Supplied as separate components; this is the normal packaging.

SECTION 3. EFFECTS OF OVEREXPOSUREAcute Effects:

Eye: Direct eye contact may cause temporary redness, discomfort and possibly mechanical irritation and/or abrasion of the cornea.

Skin: No significant irritation expected from a single short-term exposure, avoid prolonged, repeated or excessive contact with skin. Seek medical attention if irritation persists.

Inhalation: No significant irritation expected from a single short-term exposure, avoid prolonged, repeated or excessive inhalation of dry powders, if present, which may irritate respiratory tract.

Oral: Low ingestion hazard in normal use. If gross ingestion of the dry powders occur, gastric problems may result, have conscious person drink several glasses of water or milk. **DO NOT INDUCE VOMITING.** Seek medical attention.

Prolonged/Repeated Exposure Effects:

Skin: No known applicable information.

Inhalation: No known applicable information for the blended product. Repeated inhalation of the dry powders can produce varying degrees of respiratory irritation or lung damage (siderosis).

Oral: No known applicable information.

Signs and Symptoms of Overexposure:

No known applicable information for product as supplied.

Medical Conditions Aggravated by Exposure:

Exposure to the dry powder components of this product may aggravate conjunctivitis of the eye, dermatitis of the skin, asthma and other respiratory diseases.

SECTION 4. FIRST AID MEASURES

- Eye:** Remove contact lenses if present, immediately flush with water, if irritation persists, seek medical attention.
- Skin:** No first aid should be needed, area may be flushed with water and a mild soap may be used if available. If symptoms persist, contact a poison control center, emergency room or physician for treatment information.
- Inhalation:** No first aid should be needed, however, although unlikely, if there is a gross inhalation of respirable dust, remove the person immediately to fresh air, If symptomatic, contact a poison control center, emergency room or physician for treatment information.
- Oral:** No first aid should be needed, however, if a gross ingestion of the product or dry powders occur, gently wipe or rinse the inside of the mouth with water. Gastric problems may result, have conscious person drink several glasses of water or milk. **DO NOT INDUCE VOMITING.** Contact a poison control center, emergency room or physician for treatment information.
- Comments:** Treat symptomatically.

SECTION 5. FIRE FIGHTING MEASURES

- Flash Point:** 212°F />100°C (Closed Cup); Prior to curing.
- Auto ignition Temperature:** Not determined.
- Flammability Limits in Air:** Not determined.
- Extinguishing Media:** For the blended product, on large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire-exposed containers. (Prior to curing; liquid state.). For fires involving the dry powders, do not use foam or carbon dioxide; **USE A FOG NOZZLE WATER SPRAY.**
- Fire Fighting Measures:** Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep the fire exposed containers cool. (Prior to curing; liquid state.) Avoid formation of dust clouds.

Unusual Fire Hazards: None for the blended product. Dry iron dust, if present, will not ignite spontaneously, but once ignited, may burn readily in air or explode.

Hazardous Decomposition Products:

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: metallic oxides, carbon oxides and traces of incompletely burned carbon compounds, silicon dioxide and formaldehyde.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Containment/Clean up: Determine whether to evacuate or isolate the area according to your local emergency plan. Observe all personal protection equipment recommendations described in Sections 5 and 8¹. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. The user will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements. Wear protective equipment if specified below.

Note 1: See Section 8 for personal Protective Equipment for spills.

SECTION 7. HANDLING AND STORAGE

Use with adequate ventilation. Avoid eye and skin contact, do not breathe dust, or ingest.

Use reasonable care and store in dry, well ventilated areas away from oxidizing materials and reducing agents.

When dust is present, keep airborne dust concentrations below PEL. Do not rely on your sight to determine if dust is in the air. Dust may be in the air without a visible dust cloud. If dust cannot be kept below permissible limits, wear an appropriate respirator approved for the specific dust when using, handling, storing or disposing of this product or bag. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Maintain, clean, and fit test respirators in accordance with OSHA regulations. Maintain and test ventilation and dust collection equipment. Wash or vacuum clothing that has become dusty. See also control measures in Section 8.

Precautions During Storage

Store in a dry, well ventilated area. See also control measures in Section 8.

The OSHA Hazard Communication Standard, 29 CFR Sections 1910.1200 1915.1200 1917.28 1918.28, 1926.59 and 1928.21, and state and local worker or community “right-to-know” laws and regulations should be strictly followed. **WARN YOUR EMPLOYEES (AND YOUR CUSTOMERS IN THE CASE OF RESALE) BY POSTING AND OTHER MEANS OF THE HAZARDS AND THE REQUIRED OSHA PRECAUTIONS. PROVIDE TRAINING FOR YOUR EMPLOYEES ABOUT THE OSHA PRECAUTIONS.**

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

See below.

Permissible Exposure Levels:

Material Identification			Exposure Guidelines			
Iron Powder	CAS No. 7439-89-6	Percentage (by wt.) 10%-15%	OSHA PEL		ACGIH TLV	
			TWA ³	STEL	TWA	STEL
			15mg/m ³	N.E. ¹	N.E. ¹	N.E. ¹
Barium Sulfate	CAS No. 7727-43-7	Percentage (by wt.) 45%-55%	OSHA PEL		ACGIH TLV	
			TWA ²	STEL	TWA ³	STEL
			5mg/m ³	N.E. ¹	10mg/m ³	N.E. ¹

¹Not Established

²Respirable Dust

³Total Dust

Engineering Controls

Local Ventilation: Use sufficient local exhaust to reduce the level of respirable dusts, if present, to below the applicable PEL. See ACGIH “Industrial Ventilation, A Manual of Recommended Practice” (latest edition).

General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes:	Use proper protection – safety glasses as a minimum. If powder exposure to the eyes is likely, use tight fitting chemical safety goggles.
Skin:	Washing at mealtime and at end of shift is adequate.
Suitable Gloves:	No special protection needed for the blended product. For dry powders avoid prolonged, repeated or excessive contact with skin, if expected wear gloves to avoid skin dryness or irritation.
Inhalation:	No respiratory protection should be needed for the blended product. For dry powders, the specific respirator must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.
Suitable Respirator:	Where respirable dust is present above permissible exposure limits, use appropriate NIOSH approved dust filter respirator.

Personal Protective Equipment for Spills

Eyes:	Use proper protection – safety glasses as a minimum. If powder exposure to the eyes is likely, use tight fitting chemical safety goggles.
Skin:	Washing at mealtime and at end of shift is adequate.
Inhalation /Suitable Respirator:	See above.
Precautionary Measures:	Avoid eye contact. Use reasonable care.

Comments: When heated to temperatures above 180 degrees C in the presence of air, this product as supplied can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant to the eyes, nose, throat, skin and digestive system. Safe handling conditions for material temperatures above 180 degrees C in the presence of air may be maintained by keeping vapor concentrations within the OSHA Permissible Exposure Limit (PEL) for formaldehyde.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

The following is for the product as supplied, (separate components):

Physical Form:	Liquid
Color:	Clear
Odor:	odorless
Specific Gravity @ 25°C	0.972
Viscosity:	415 cSt
Boiling Point	>100°C
Freezing/Melting Point:	Not determined
Vapor pressure @25°C	Not determined
Vapor Density:	Not determined
Solubility In Water:	Not determined
pH:	Not determined
Volatile Content:	Not determined

When the material is supplied as separate components, additional components will be included and will have the following properties:

Appearance:	Powder or granules
Color:	White to Tan
Odor:	None
Specific Gravity @ 25°C	N/A
Freezing/Melting Point:	N/A
Vapor pressure (mm Hg)	None
Vapor Density (Air = 1):	N/A
Solubility In Water:	Insoluble in water
Melting Point	N/A
Boiling Point:	N/A
Evaporation Rate (Butyl Acetate =1):	N/A

Appearance:	Granular powder
Color:	Gray
Odor:	None
Specific Gravity @ 25°C	>7
Freezing/Melting Point:	Not determined
Vapor pressure (mm Hg)	None
Vapor Density (Air = 1):	None
Solubility In Water:	Insoluble in water
Melting Point	1535°C
Boiling Point:	2750°C
Evaporation Rate (Butyl Acetate =1):	None

Note: The above information is not intended for use in preparing product specifications. Contact PCI-Promatec before writing specifications.

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Hazardous polymerization will not occur under normal temperatures and pressures.
Conditions to avoid:	For the product after component blending, none known. For dry iron powder, dust clouds coupled with ignition sources.
Materials to Avoid:	For dry barium sulfate avoid powdered aluminum and phosphorous (primed with potassium nitrate-calcium silicide).
Hazardous Decomposition or Byproducts:	Oxidizing material can cause a reaction. May include toxic and hazardous oxides of sulfur and barium.

SECTION 11. TOXICOLOGICAL INFORMATION

Special hazard information on components

No known applicable information. See also Section 3.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Complete information is not yet available.

Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water treatment Plants

Complete information is not yet available.

SECTION 13. DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as hazardous waste?

Yes.

Characteristic Waste Reactive: D003

SECTION 14. TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)

Not subject to DOT

Ocean Shipment (IMDG)

Not subject to IMDG code.

Air Shipment (IATA)

Not subject to IATA regulations.

SECTION 15. REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or are exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances:

None

Section 304 CERCLA Hazardous Substances:

None

Section 312 Hazard Class:

Acute: No
Chronic: No
Fire: No
Pressure: No
Reactive: **Yes**

Section 313 Toxic Chemicals

None present in regulated quantities.

New Jersey

<u>CAS number</u>	<u>Wt %</u>	<u>Component Name</u>
68083-19-2	>12%	Dimethyl siloxane, dimethylvinyl-terminated
68037-59-2	<3%	Dimethyl methylhydrogen siloxane
7439-89-6	10%-15%	Iron
7727-43-7	45%-55%	Barium Sulfate

Pennsylvania

<u>CAS number</u>	<u>Wt %</u>	<u>Component Name</u>
68083-19-2	>12%	Dimethyl siloxane, dimethylvinyl-terminated
7439-89-6	10%-15%	Iron
7727-43-7	45%-55%	Barium Sulfate

SECTION 16. OTHER INFORMATION

Prepared by: PCI-Promatec

These data are based on information supplied by the manufacturers of the base components. These data are offered in good faith. The manufacturer of the base components considers values shown herein to be typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.