

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Generic Description: Silicone Compound PCI-Promatec
 Physical Form: Viscous & Liquid/Dry Powders* 11707 West Sam Houston Parkway South Suite K
 Color: Black (Liquid)** Houston, TX 77031
 Odor: Some Odor 281-933-7222

*When supplied as separate components; this is the normal packaging. See sections 3 and 11 of this MSDS.
 **After combining of separate components. See Section 9 for separate components.

SECTION 2. CHEMICAL COMPOSITION & DATA

CAS number	Wt %*	Wt %**	Component Name
112926-00-8	>87%	<5%	Hydrated, Amorphous Silica ¹
14808-60-7	>2%	>1.5%	Crystalline Silica (Quartz)
7439-89-6	>65%	>43%	Iron

¹Contains no detectable crystalline silica (detection limit <0.01% by weight)

HMIS Profile:	Health: *	Flammability 3*1*	Reactivity 1*0**	Protective Equipment E
NFPA Profile:	Health: 0,1*	Flammability 3*1*	Reactivity 1*0**	

* (If supplied as separate components, this is the normal packaging; see sections 3 and 11 of this MSDS)
 ** (When supplied silica premixed; available by special request only.)

SECTION 3. HAZARDS IDENTIFICATION

Acute Effects:

Eye: Direct eye contact may cause temporary redness and discomfort. Hydrated, Amorphous Silica and metallic aggregate may cause mild irritation and/or abrasion of the cornea.

Skin: No significant irritation expected from a single short-term exposure, (combined components). For the dry powders, avoid prolonged, repeated or excessive contact with skin; may cause drying or irritation. Seek medical attention if irritation persists.

Inhalation: No significant irritation expected from a single short-term exposure, when supplied premixed. Avoid prolonged, repeated or excessive inhalation of dry powders which may irritate respiratory tract, see below:

Oral: Low ingestion hazard in normal use. Although unlikely, if a gross ingestion of the dry powders occurs, seek medical attention.

Physical: Spills are slippery - (liquid component).

Prolonged/Repeated Exposure Effects:

Silica is chemically inert and is a non-combustible mineral. Excessive and long-term exposure to silica dust may cause lung disease and silicosis.

Eye: Conjunctivitis of the eye is possible.

Skin: No known applicable information for the blended product. For dry powders, dermatitis of the skin is possible; avoid prolonged, repeated or excessive contact with skin. If contact is expected, wear gloves to avoid skin dryness or irritation.

Inhalation : No known applicable information for the blended product. When supplied as separate components, repeated inhalation of the dry powders can produce varying degrees of respiratory irritation. Although this product contains a very low percentage of crystalline silica, crystalline silica is listed by NTP as a known human carcinogen, and it is classified by IARC in Group 1; materials for which there is sufficient evidence in humans for carcinogenicity. The adverse health effects – Silicosis, cancer, autoimmune diseases, tuberculosis, and nephrotoxicity are chronic effects. Hydrated, Amorphous Silica is not listed as a carcinogen or suspected carcinogen by NTP, IARC or OSHA. Excessive contact with powder can cause drying of mucous membranes of nose, eyes and throat due to absorption of moisture and oils. Excessive contact can also cause nasal and respiratory tract irritation and nosebleeds.

<u>Silicosis</u>	Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability and death.
<u>Cancer</u>	Respirable crystalline silica (quartz) inhaled from occupational sources is classified as carcinogenic to humans.
<u>Autoimmune Diseases:</u>	There are some studies that show excess numbers of cases of scleroderma and other connective tissue disorders in workers exposed to respirable crystalline silica.
<u>Tuberculosis</u>	Silicosis increases the risk of tuberculosis.
<u>Nephrotoxicity</u>	There are some studies that show an increased incidence of chronic kidney disease and end-stage renal disease in workers exposed to respirable crystalline silica.

An epidemiological study was conducted for Hydrated, Amorphous Silica which included 165 precipitated silica workers who had been exposed an average time span of 8.6 years. Of these 165 workers, 44 had been exposed for an average of 18 years. No adverse effects were noted in complete medical examinations (including chest roentgenograms) of these workers. Pulmonary function decrements were correlated only with smoking and age but not with the degree or duration of dust exposures.

Laboratory studies have also been conducted in small animals via inhalation of levels of precipitated silica dust of up to 126 mg/cu.m. per periods from six months to two years. Although precipitated silica was temporarily deposited in the animal's lungs, most of the deposited material was cleared soon after the dust exposure ended.

The results of all studies performed by, or known to, the manufacturer indicate a very low order of pulmonary activity for synthetic silicas.

The manufacturer recommends that the persons with breathing problems or lung disease should not work in dusty areas unless a physician approves and certifies their fitness to wear respiratory protection.

IARC reviewed the data on amorphous silica in 1996 and concluded there was inadequate evidence from both epidemiology and experimental studies that amorphous silica is a carcinogenic risk factor. The organization concluded that amorphous silica is in Group 3.

Oral: No known applicable information. Dry powders could induce gastric problems.

Signs and Symptoms of Overexposure:

No known applicable information.

Medical Conditions Aggravated by Exposure:

The condition of individuals with lung disease (e.g. bronchitis, emphysema, chronic obstructive pulmonary disease) can be aggravated by exposure to respirable crystalline silica (quartz). (When supplied as separate components). Also, exposure to the dry powder components of this product may aggravate conjunctivitis of the eye, dermatitis of the skin, asthma and other respiratory diseases. No known applicable information for hydrated amorphous silica.

SECTION 4. FIRST AID MEASURES

- Eye:** Remove contact lenses if present, immediately flush with water, if irritation persists, seek medical attention. Abrasion to the cornea is possible.
- Skin:** No first aid should be needed. For dry powders, if irritation develops, 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, if there is a gross inhalation of respirable dust, remove the person immediately to fresh air, give artificial respiration as needed, seek medical attention as needed.
- Oral:** No first aid should be needed, however, although unlikely, if a gross ingestion of the dry powders occurs, gently wipe or rinse the inside of the mouth with water. Sips of water can be given to a conscious person. If possible, have victim 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:** ~249°F />121°C (Closed Cup). Prior to curing; liquid state.
- Autoignition Temperature:** Not determined.
- Flammability Limits in Air:** Not determined
- Extinguishing Media:** For the premixed or already blended material, 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 metal containers. (Prior to curing; liquid state.) For fires involving the dry powders, use a fog nozzle to spray water, see also Unusual Fire Hazards below.
- 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 metal containers cool. (Prior to curing; liquid state.) Avoid formation of dust clouds.

Unusual Fire Hazards: As with any finely granulated product (e.g. flour) a risk of fire is present should the material be dispersed in air and exposed to a source of ignition. Fine powder of the metallic aggregate can form flammable and explosive mixtures in air.

Hazardous Decomposition Products:

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

When supplied as separate components, the hydrated, amorphous silica when exposed to high temperature (>800°C) treatment results in calcining; calcining may result in crystalline formation. When supplied as separate components, silica will dissolve in hydrofluoric acid, producing a corrosive gas, silicon tetrafluoride. When crystalline silica is heated to more than 870°C (1598°F) it forms trydimite. Crystalline silica heated over 1470°C (2678°F) can change to cristobalite. The OSHA PEL for crystalline silica as trydimite and cristobalite is one-half of the OSHA PEL for crystalline silica (quartz).

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 8^{2,3}. 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. When supplied as separate components for respirable crystalline or Hydrated, Amorphous Silica, or metallic aggregate, vacuum spilled material and place into closable container for disposal. Do not dry sweep. Wear protective equipment if specified below.

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

Note 2: Substantially reduced when pre-blended material is supplied.

SECTION 7. HANDLING AND STORAGE

Use with adequate ventilation. Avoid eye and skin contact, and contact with clothing; avoid generating respirable dust, do not breathe dust, or ingest.

Use reasonable care and store away from oxidizing materials; keep containers closed.

Do not breathe respirable dust. Use adequate ventilation and appropriate dust collection. Keep airborne dust concentrations below PEL. Do not rely on your sight to determine if dust is in the air. Silica may be in the air without a visible dust cloud.

If dust cannot be kept below permissible limits, wear a respirator approved for the particular respirable 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

Keep containers closed; store in a dry, well ventilated area. Avoid breakage of containerized materials or spills of the dry powder material ⁴. See also control measures in Section 8.

The OSHA Hazard Communication Standard, 29 CFR Sections 1910.1200, 1915.1200, 1917.28, 1918.90, 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.**

See also the American Society for testing and Materials (ASTM) standard practice E 1132-99a, “Standard Practice for Health Requirements Relating to Occupational Exposure to Respirable Crystalline Silica.”

Note 4: Substantially reduced when pre-blended material is supplied.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

See below.

Permissible Exposure Levels:

For separate components:

Material Identification			Exposure Guidelines						
Component	CAS No.	Percentage (by wt.)	OSHA PEL		ACGIH TLV		NIOSH REL		Unit
			TWA	STEL	TWA	STEL	TWA	STEL	
Crystalline Silica (quartz)	14808-60-7	>2.0	10/%SiO ₂ +2	None	0.025	None	0.05	None	mg/m ³
Iron Respirable	CAS No. 7439-89-6	Percentage (by wt.) >65.0	OSHA PEL		ACGIH TLV		NIOSH REL		
			TWA ⁷	STEL	TWA	STEL	TWA	STEL	Unit
			15	N.A.	10	N.A.	N.A.	N.A.	mg/m ³
Hydrated, Amorphous Silica	CAS No. 112926-00-8	Percentage (by wt.) >87.0	OSHA PEL		ACGIH TLV		NIOSH REL		
			TWA ³	STEL	TWA ⁶	STEL	TWA	STEL	Unit
			6mg/m ³	N.A.	10/3	N.A.	N.A.	N.A.	mg/m ³

Note 5: Total dust.

Note 6: Total amorphous dust/respirable nuisance particulate.

Note 7: Respirable Fraction (PNOR)

Engineering Controls

Local Ventilation⁸:

Use sufficient local exhaust to reduce the level of respirable Hydrated, Amorphous Silica to below the PEL. See ACGIH “Industrial Ventilation, A Manual of Recommended Practice” (latest edition).

General Ventilation:

Recommended.

Note 8: None should be needed when pre-blended material is supplied.

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. For the dry powders, avoid repeated exposure to the skin.
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, (above PEL), 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. For the dry powders, avoid repeated exposure to the skin.
Inhalation /Suitable Respirator:	Recommended. (When handling dry powders)
Precautionary Measures:	See above.

Comments: When heated to temperatures above 180 degrees C in the presence of air, product 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 may be maintained by keeping vapor concentrations within the OSHA Permissible Exposure Limit (PEL) for formaldehyde. If crystalline silica (quartz) is heated to more than 1598 °F (870°C) it can change to a form of crystalline silica known as trydimite, and if crystalline silica is heated to more than 2646 °F (1470°C) it can change to a form of crystalline silica known as cristobalite. The OSHA PEL for crystalline silica as trydimite and cristobalite is one-half of the OSHA PEL for crystalline silica (quartz).

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

The following is for the liquid component:

Physical Form:	Liquid
Color:	Black
Odor:	Some odor
Specific Gravity @ 25°C:	~0.97
Viscosity:	~420 cSt
Freezing/Melting Point:	Not determined
Vapor pressure @25°C:	Not determined
Vapor Density:	Not determined
Solubility In Water:	Not determined
	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
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:	Essentially insoluble in water
Melting Point:	N/A
Boiling Point:	N/A
Evaporation Rate (Butyl Acetate =1):	N/A
pH:	6.5-7.3 (5% suspension) Hydrated, Amorphous Silica
Appearance:	Metallic flakes
Color:	Gray
Odor:	None
Specific Gravity @ 25°C:	>2.65
Freezing/Melting Point:	Not determined
Vapor pressure (mm Hg):	None
Vapor Density (Air = 1):	None
Solubility In Water:	Insoluble in water
Melting Point:	N/A
Boiling Point:	N/A
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 powder, generation of respirable dust. For Hydrated, Amorphous Silica, calcining (exposure to >800°C) may result in crystalline formation. For crystalline silica, exposure to temperatures >870°C may result in a more hazardous crystalline formation.
Materials to Avoid:	For crystalline silica (quartz) contact with oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide and oxygen difluoride may cause fires.
Hazardous Decomposition Products:	Oxidizing material and reducing agents can cause a reaction. Silica will dissolve in hydrofluoric acid and produce a corrosive gas – silicon tetrafluoride.

SECTION 11. TOXICOLOGICAL INFORMATION**Special hazard information on components**

No known applicable information for blended material; when supplied as separate components see below and also Section 3. For respirable crystalline silica (quartz): When crystalline silica is heated to more than 870°C it forms tridymite. Crystalline silica heated to more than 1470°C forms cristobalite. The OSHA PEL for crystalline silica as tridymite and cristobalite is one-half of the OSHA PEL for crystalline silica (quartz).

For respirable crystalline silica (quartz):

A. Silicosis

The major concern is silicosis, caused by inhalation and retention of respirable crystalline silica dust. Silicosis can exist in several forms, chronic (or ordinary), accelerated, or acute.

Chronic or Ordinary Silicosis (often referred to as Simple Silicosis) is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. It is further defined as either simple or complicated silicosis.

Simple silicosis is characterized by lung lesions (shown as radiographic opacities) less than 1 centimeter in diameter, primarily in the upper lung zones. Often, simple silicosis is not associated with symptoms, detectable changes in lung function or disability.

Simple silicosis may be progressive and may develop into complicated silicosis or progressive massive fibrosis (PMF). Complicated silicosis or PMF is characterized by lung lesions (shown as radiographic opacities) greater than 1 centimeter in diameter. Although there may be no symptoms associated with complicated silicosis or PMF, the symptoms, if present, are shortness of breath, wheezing, cough and sputum production. Complicated silicosis or PMF may be associated with decreased lung function and may be disabling. Advanced complicated silicosis or PMF may lead to death. Advanced complicated silicosis or PMF can result in heart disease secondary to the lung disease (cor pulmonale).

Accelerated Silicosis can occur with exposure to high concentrations of respirable crystalline silica over a relatively short period; the lung lesions can appear within five (5) years of the initial exposure. The progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that the lung lesions appear earlier and the progression is more rapid.

B. CANCER

IARC – The International Agency for Research on Cancer (“IARC”) concluded that there was “*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources”, and that there is “*sufficient evidence* in experimental animals for the carcinogenicity of quartz and cristobalite.” The overall IARC evaluation was that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans (Group 1)*.” The IARC evaluation noted that “carcinogenicity was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.” For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68, “Silica, Some Silicates...” (1997).

NTP – The National Toxicology Program, in its Ninth Annual Report on Carcinogens, classified “silica, crystalline (respirable)” as a known human carcinogen.

OSHA – Crystalline silica (quartz) is not regulated by the U.S. Occupational Safety and Health Administration as a carcinogen.

There have been many articles published on the carcinogenicity of crystalline silica, which the reader should consult for additional information; the following are examples of recently published articles: (1) “Crystalline Silica and Lung Cancer: The Problem of Conflicting Evidence”, Indoor Build Environ, Volume 8, pp. 121-176 (1998); (2) “Crystalline Silica and the risk of lung cancer on the potteries”, Occup. Environ. Med., Volume 55, pp. 779-785 (1998); (3) “Is Silicosis Required for Silica-Associated Lung Cancer?”, American Journal of Industrial Medicine, Volume 37, pp. 252-259 (2000); (4) “Silica, Silicosis, and Lung Cancer: A Risk Assessment”, American Journal of Industrial Medicine, Volume 38, pp. 8-18 (2000); (5) “Silica, Silicosis and Lung Cancer: A Response to a Recent Working Group Report”, Journal of Occupational and Environmental Medicine, Volume 42, pp. 704-720 (2000).

C. AUTOIMMUNE DISEASES

There is evidence that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis is associated with the increased incidence of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis and diseases affecting the kidneys. For a review of the subject, the following may be consulted: “Occupational Exposure to Crystalline Silica and Autoimmune Disease”, Environmental Health Perspectives, Volume 107, Supplement 5, pp. 793-802 (1999); “Occupational Scleroderma”, Current Opinion on Rheumatology, Volume 11, pp. 490-494 (1999).

D. TUBERCULOSIS

Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis. The following may be consulted for further information: Occupational Lung Disorders, Third Edition, Chapter 12, entitled “Silicosis and Related Diseases”, Parkes, W. Raymond (1994); “Risk of pulmonary tuberculosis relative to silicosis and exposure to silica dust in south African gold miners,” Occup Environ Med., Volume 55, pp. 496-502 (1998).

E. KIDNEY DISEASE

There is evidence that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis is associated with the increased incidence of kidney diseases, including end stage renal disease. For additional information on the subject the following may be consulted: “Kidney Disease and Silicosis”, Nephron, Volume 85, pp. 14-19 (2000).

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.

Ecotoxicological Information (for Hydrated, Amorphous Silica)

EC₀: >1000 ppm (daphnia magna) (24-hour acute mobilization test)

EC₀: >10,000 ppm (rainbow trout) (4-day static study)

EC₀: >10,000 ppm (freshwater fish) (96-hour static acute toxicity study)

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?
No.

Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers. Disposal of this product, its sub components, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any federal, regional and local authority requirements. Efforts should be made to minimize generation of airborne dust. Limit exposure so that it does not exceed OSHA standard TLV. Water may be used to limit dust.

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. Hydrated, Amorphous Silica is listed on the TSCA Inventory as its general CAS# 7631-86-9.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances:

None

Section 304 CERCLA Hazardous Substances:

None

Section 312 Hazard Class:

Acute:	No, premixed; Hydrated, Amorphous Silica, yes
Chronic:	No
Fire:	No
Pressure:	No
Reactive:	No

Section 313 Toxic Chemicals

None present or none present in regulated quantities.

OSHA Carcinogen:

Crystalline silica (quartz) is **NOT** listed.

NTP:

Respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, is classified as Known to be a Human Carcinogen.

Canada

Domestic Substances List: Sub-supplier's products, as a naturally occurring substance, is on the Canadian DSL (crystalline silica (quartz)), and is exempt.

WHMIS Classification: D2A

Supplemental State Compliance Information

California

Warning: This product contains the following chemical(s) listed by the state of California under the safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

Crystalline silica (quartz) – Carcinogen

California Inhalation Reference Exposure Level (REL)

California established a chronic REL of 3 ug for silica (crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no adverse health effects are anticipated in individuals indefinitely exposed to the substance at that level.

Massachusetts

No ingredient regulated by MA Right-to-Know Law Present (liquid component), no information available for the dry powders.

Massachusetts Toxic Use Reduction Act:

Silica, crystalline (respirable size, <10 microns) is "toxic" for the purposes of the Massachusetts Toxic Use Reduction Act.

New Jersey

<u>CAS number</u>	<u>Wt %*</u>	<u>Wt %**</u>	<u>Component Name</u>
112926-00-8	>87%	<5%	Hydrated, Amorphous Silica ¹
14808-60-7	>2%	>1.5%	Crystalline Silica (Quartz)
7439-89-6	>65%	>43%	Iron
68083-19-2	>60%	<10.0%	Dimethyl siloxane, dimethylvinyl-terminated
14808-60-7	<1%	<1%	Quartz (Liquid Component)
1333-86-4	<0.1%	<0.1%	Carbon black

Note 1: Contains no detectable crystalline silica (detection limit <0.01% by weight)

- * (If supplied as separate components, available by special request only; see sections 3 and 11 of this MSDS)
- ** Supplied Hydrated Amorphous Silica premixed; this is the normal packaging.

Pennsylvania

<u>CAS number</u>	<u>Wt %*</u>	<u>Wt %**</u>	<u>Component Name</u>
112926-00-8	>87%	<5%	Hydrated, Amorphous Silica ¹
14808-60-7	>2%	>1.5%	Crystalline Silica (Quartz)
7439-89-6	>65%	>43%	Iron
68083-19-2	>60%	<10.0%	Dimethyl siloxane, dimethylvinyl-terminated
14808-60-7	<1%	<1%	Quartz (Liquid Component)

Note 1: Contains no detectable crystalline silica (detection limit <0.01% by weight)

- * (If supplied as separate components, available by special request only; see sections 3 and 11 of this MSDS)
- ** Supplied Hydrated Amorphous Silica premixed; this is the normal packaging.

Other

EINECS No. 238-878-4
 EEC Label (Risk/Safety Phrases): R 48/20, R40/20, S22, S38

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.