

W. R. GRACE
MATERIAL SAFETY DATA SHEET

Product Name: Serpiloc White
MSDS ID Number: Z-01621

MSDS Date: 04/15/2004

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Serpiloc White
MSDS Number: Z-01621
Cancelled MSDS Number: Z-01563
MSDS Date: 04/15/2004
Chemical Family Name: Filled Vinyl & Acrylic Emulsion
Product Use: Pre-Mix Lock-Down Penetrating Asbestos Encapsulant
Chemical Formula: Mixture-NA
CAS # (Chemical Abstracts Service Number): Mixture-NA

Manufactured by:

W.R.Grace & Co.-Conn. 62 Whittemore Avenue Cambridge, MA 02140	Grace Canada, Inc. 294 Clements Road West Ajax, Ontario L1S 3C6
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In Case of Emergency Call:

In USA: (617) 876-1400 In Canada: (905) 683-8561

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS#	Percent (max)
2-Propenoic acid, butyl ester, polymer with ethenyl acetate	025067-01-0	1-10
Calcium carbonate	001317-65-3	1-10
Ethylene Glycol	000107-21-1	1-10
Magnesium Aluminum Silicate	012174-11-7	< 1
Quartz	014808-60-7	< 1
Titanium dioxide	013463-67-7	1-10

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview:

Caution!

Causes eye irritation.
Causes skin irritation.
Causes respiratory tract irritation.
Causes digestive tract irritation if ingested.
May cause teratogenic and developmental toxic affects.
May cause sensitization.

HMIS Rating:

Health:	2*
Flammability:	0
Reactivity:	0
Personal Protective Equipment:	G (See Section 8)

Potential Health Effects:

Inhalation:

Spray applications of this material may create aerosols which may be irritating to the upper respiratory tract, nose, and throat.
Vapors or mist in unusually high concentrations generated from spraying, heating or use in poorly ventilated areas can cause a burning sensation, shortness of breath, headache, nausea, coughing and wheezing. Prolonged or repeated overexposure may result in fluid in the lungs, chemical pneumonia and serious damage to lung tissue and respiratory tract. Absorption through the lungs may cause symptoms similar to those identified under ingestion.

Eye Contact:

Spray applications of this material may create aerosols which may be irritating to the eyes.
Prolonged eye contact can result in redness and itching.

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Skin Contact:

Skin contact causes irritation.
Prolonged skin contact can result in irritation causing redness and itching.
May cause sensitization.

Skin Absorption:

Not expected to be harmful if absorbed through the skin.

Ingestion:

If ingested, causes irritation to the linings of the mouth, esophagus and stomach.
Effects include: Drowsiness, nausea, fatigue, pulmonary edema (from aspiration into the lungs from vomiting), CNS depression, coma, headache, convulsions, irritation, Diethylene & Ethylene glycol can cause liver and kidney damage. Ethylene glycol has been shown to produce teratogenic and developmental toxic effects in laboratory animals.

SECTION 4 - FIRST AID MEASURES:

Skin Contact:

Wash with soap and water.
If discomfort or irritation persists, consult a physician.
Remove contaminated clothing and wash before reuse.

Eye Contact:

Flush eyes with water for at least 15 minutes while holding eyelids open.
If discomfort or irritation persists, consult a physician.

Ingestion:

Do not induce vomiting.
Never give anything by mouth to an unconscious person.
If discomfort or irritation persists, consult a physician.

Inhalation:

If symptoms develop, get fresh air. If symptoms persist, consult a physician.
If breathing has stopped, give artificial respiration then oxygen if needed.

SECTION 5 - FIRE AND EXPLOSION HAZARD DATA

Flash Point:	None (water base compound)
Flash Point Method:	Not Applicable
Lower Explosion Limit:	Not Available
Upper Explosion Limit:	Not Available
Auto-Ignition Temperature:	Not Available

NFPA Rating:

Health:	1
Flammability:	0
Reactivity:	0

Extinguishing Media: In case of fire, use water spray, dry chemical, Carbon dioxide or foam.

Special Fire Fighting Procedures:

Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to vapors or products of combustion exist. Isolate area and keep unnecessary people away.

Unusual Fire and Explosion Hazards:

None unless noted below.

SECTION 6 - ACCIDENTAL RELEASE MEASURES:

Spills/Leaks:

Prevent spills from entering drinking water supplies, streams, or sewers.
Collect material with an inert, noncombustible material and remove for disposal.

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SECTION 7 - HANDLING AND STORAGE

Precautionary Measures:

Avoid inhalation of vapor. Keep containers tightly closed.
Avoid contact with eyes, skin and clothing.
Do not take internally.
Practice good personal hygiene to avoid ingestion.
Spray application requires use of respiratory protection.
Wash clothing before reuse.
FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT
EXPOSURE GUIDELINES (US)

Ingredient	ACGIH TLV			OSHA PEL			Other
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	
2-Propenoic acid, butyl ester, polymer with ethenyl acetate	-	-	-	-	-	-	-
Calcium carbonate	10 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica)	-	-	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	-	-	-
Ethylene Glycol	-	-	100 mg/m3 Ceiling (aerosol only)	-	-	-	-
Quartz	0.05 mg/m3 TWA (respirable fraction)	-	-	0.1 mg/m3 TWA (respirable dust)	-	-	-
Titanium dioxide	10 mg/m3 TWA	-	-	10 mg/m3 TWA (total dust)	-	-	-

Respirable Quartz (Crystalline silica) can result in lung disease (i.e. silicosis and or lung cancer). However, due to the physical nature of this product (liquid) exposures are not expected unless after product dries it is abraded and airborne dust is created.

EXPOSURE GUIDELINES (CANADA)

Employers should consult local Provincial regulatory limits for exposure guidelines which may vary locally.

Engineering Controls: Use local exhaust ventilation or increased general ventilation when possible.

Personal Protective Equipment:

Respiratory Protection: Respiratory protection is required during spray application. A dust/mist respirator such as a 3M Type P-95 or 3M Type 3-95 with organic vapor protection (or equivalent) is adequate. Specific working conditions, which must be assessed periodically, may require an increased level of respiratory protection. A respirator equipped with organic vapor cartridges may be required indoors and in other poorly ventilated areas. Respirators may not be required during non-spray applications and other specific situations. In all cases, maintain exposures below governmental limits specified in Section 2. (See Work/Hygenic Practices for additional information.)

Skin Protection: Impervious (PVC, latex or nitrile) gloves should be worn anytime direct contact is possible.

Eye Protection: Wear goggles to prevent exposure to high vapor or mist concentrations. Wear goggles or safety glasses with side shields and a full-face shield to prevent contact due to splashing.

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Work/Hygienic Practices: Work clothing with long sleeves/long pants and work boots must be worn. Clothing must be laundered before reuse. Disposable tyvek suits may be used during spray applications.

This product contains compounds subject to exposure guidelines and/or identified as carcinogens. (See Sections 8 and 11). However, due to the physical nature of this product, these compounds are unlikely to reach exposure limits unless airborne dust or spray mist is created.

Quartz (Crystalline silica) is a naturally occurring mineral that is contained in the materials that are mined from the earth's surface such as sand, limestone, clay and gypsum (calcium sulfate). Total quartz is a value usually representing the combined fraction of large non-respirable sized particles and of respirable sized particles (less than ten micros in aerodynamic diameter). It is only the respirable sized fraction of total quartz that is recognized as hazardous by professionals in the field of Occupational Health and by most regulatory agencies.

This product contains compounds subject to exposure guidelines and/or identified as carcinogens (See section 8 and 11).

Due to the physical nature of this product, (liquid) these compounds are unlikely to reach exposure limits unless after product dries, it is abraded and airborne dust is created.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Appearance/Odor:	White liquid, mild latex odor.
Odor Threshold: (ppm)	Not Determined
pH:	Not Available
Vapor Pressure: (Mm Hg)	Unknown
Vapor Density: (Air = 1)	>1
Solubility In Water:	Appreciable
Specific Gravity: (Water = 1)	Not Available
Evaporation Rate: (Butyl Acetate = 1)	>1.0
Boiling Point:	>212°F/100°C
Viscosity:	Unknown
Bulk Density: (Pounds/Cubic Foot)(Pcf)	Not Applicable
% Volatiles (gr/L): (70°F) (21°C)	~80 %

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:	Stable
Conditions To Avoid:	Strong oxidizers, Strong acids, Ammonium salts, fluorine, manganese trioxide, oxygen difluoride and chlorine trifluoride.
Hazardous Polymerization:	Will not polymerize.
Hazardous Decomposition Products:	Carbon dioxide, Carbon monoxide, magnesium carbonate and lime.

SECTION 11 - TOXICOLOGICAL INFORMATION

Ingredient(No data unless listed.)	CAS Number	LD50 and LC50
Ethylene Glycol	000107-21-1	Inhalation LC50 Rat : 10876 mg/kg Oral LD50 Rat : 4700 mg/kg Oral LD50 Mouse : 5500 mg/kg Dermal LD5

Carcinogenicity:

Ingredient	IARC Group 1	IARC Group 2A	IARC Group 2B	NTP Known	NTP Suspect	OSHA
2-Propenoic acid, butyl ester, polymer with ethenyl acetate	No	No	No	No	No	No
Calcium carbonate	No	No	No	No	No	No
Ethylene Glycol	No	No	No	No	No	No
Magnesium Aluminum Silicate	No	No	Yes	No	No	No

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Quartz	Yes	No	No	Yes	Yes	No
Titanium dioxide	No	No	No	No	No	No

Product contains less than 1% Quartz. Prolonged and repeated exposure to respirable Quartz (Crystalline silica) can decrease lung function and create risk of lung disease (i.e. silicosis and/or lung cancer). However, Quartz is not expected to be bio-available during routine use and application.

Mutagenicity: Not applicable.
Teratogenicity: Ethylene glycol contained in this product has been shown to produce teratogenic effects in laboratory animals.
Reproductive Toxicity: Not applicable.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Fate: No data available for product.
Ecotoxicity: No data available for product.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Procedures:
 Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing waste for disposal. According to EPA (40 CFR § 261), waste of this product is not defined as hazardous. Dispose of waste in accordance with all applicable regulations.

SECTION 14 - TRANSPORTATION INFORMATION

Proper Shipping Name: Not Applicable
UN/NA Number: Not Applicable
Domestic Hazard Class: Nonhazardous
Surface Freight Classification: Paint, Non Toxic
Label/Placard Required: Not Applicable

SECTION 15 - REGULATORY INFORMATION

REGULATORY CHEMICAL LISTS:

CERCLA (Comprehensive Response Compensation and Liability Act):
(None present unless listed below)

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>	<u>CERCLA RQ</u>
Ethylene Glycol	000107-21-1	2.17	5000 lb final RQ; 2270 kg final RQ

SARA Title III (Superfund Amendments and Reauthorization Act)

SARA Section 312/Tier I & II Hazard Categories:

Health Immediate (acute)	Yes
Health Delayed (chronic)	Yes
Flammable	No
Reactive	No
Pressure	No

302 Reportable Ingredients (Identification Threshold 1%.):

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>	<u>SARA 302 TPQ</u>
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313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
Acetaldehyde	000075-07-0	.00516
Chloroethalonil	001897-45-6	.0404
Ethylene Glycol	000107-21-1	2.17
Glycol ethers	RR-00067-9	.0028

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Vinyl acetate	000108-05-4	.0129
Zinc compounds	RR-00578-7	.94

National Volatile Organic Compound Emission Standards For Architectural Coatings:

Volatile Organic Content: (gr/L) 92.9 gr/L

WHMIS Classification(s): D2 B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR). This MSDS contains all the information required by the CPR.

State Regulatory Information:

California Proposition 65: WARNING! This product contains substances known to the state of California to cause cancer, birth defects or other reproductive harm.

Massachusetts Hazardous Substance List(Identification threshold 0.001%(1ppm)):

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
Acetaldehyde	000075-07-0	.00516
Chlorothalonil	001897-45-6	.0404
Quartz	014808-60-7	.1
Vinyl acetate	000108-05-4	.0129

New Jersey Hazardous Substance List(Identification threshold (0.1%)):

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
Ethylene Glycol	000107-21-1	2.17
Zinc compounds	RR-00578-7	.94

Pennsylvania Hazardous Substance List(Identification threshold 0.01%):

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
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CHEMICAL INVENTORY STATUS:

All chemicals in this product are listed or exempt from listing in the following countries:

US	CANADA		EUROPE	AUSTRALIA	JAPAN	KOREA	PHILIPPINES
TSCA	DSL	NDSL	EINECS/ELINCS	AICS	ENCS	ECL	PICCS
Yes	Not Determined	Yes	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined

SECTION 16 - OTHER INFORMATION

Non-Hazardous Ingredient Disclosure:

<u>Chemical Name</u>	<u>CAS Number</u>
Water	007732-18-5

Prepared by: EH&S Department
Approved by: EH&S Department
Approved Date: 04/15/2004

Disclaimer:

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."