

W. R. GRACE

MATERIAL SAFETY DATA SHEET

Product Name: ProBase® Pool Liner Premix

MSDS ID Number: Z-01636

MSDS Date: 05/18/2004

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: ProBase® Pool Liner Premix
MSDS Number: Z-01636
Cancelled MSDS Number: Z-01545
MSDS Date: 05/18/2004
Chemical Family Name: Blend of Portland Cement and Vermiculite
Product Use: Poolbase
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

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)
Portland cement	065997-15-1	50-100
Quartz	014808-60-7	1-10
Vermiculite	001318-00-9	25-50

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview:

Warning!

Irritating to eyes, skin and respiratory system.

Prolonged exposure may cause alkali burns resulting in damage to skin and eyes.

May cause risk of lung disease (i.e. silicosis and/or lung cancer).

HMIS Rating:

Health: 2*
Flammability: 0
Reactivity: 0
Personal Protective Equipment: B,E (See Section 8)

Potential Health Effects:

Inhalation:

Causes respiratory tract irritation.

Prolonged inhalation can cause lung damage.

Long term inhalation of dust may increase risk of contracting pneumoconiosis ("dusty lungs") and decrease lung function.

Prolonged inhalation of respirable crystalline silica dust can result in lung disease (i.e. silicosis and/or lung cancer). Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.

Eye Contact:

Eye contact causes irritation.

Prolonged contact may cause burns due to the alkaline nature of cement.

Direct contact with Monokote spray may cause physical injury.

Skin Contact:

Skin contact causes irritation.

Prolonged skin contact causes burns especially if skin or product is wet. This may occur without warning since little heat is sensed.

Prolonged skin contact can result in permanent damage.

May cause sensitization due to Hexavalent chromium contained in Portland Cement.

Exposure to skin may produce "cement" dermatitis which is due to the alkaline and abrasive properties of cement dust.

Skin Absorption:

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Not expected to be harmful if absorbed through the skin.

Ingestion:

If ingested, causes irritation or burns to the linings of the mouth, esophagus and stomach.

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.

Get immediate medical attention.

Ingestion:

Dilute with weak vinegar solution or a 5% solution of ammonia chloride if available. If not, dilute with large quantities of water.

Consult a physician if symptoms develop.

Adverse health effects are not expected if swallowed.

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: Not Applicable

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: Not Applicable. Product will not burn.

Special Fire Fighting Procedures:

None

No special procedures specific to this product.

Unusual Fire and Explosion Hazards:

None.

SECTION 6 - ACCIDENTAL RELEASE MEASURES:

Spills/Leaks:

Carefully shovel or sweep up spilled material and place in suitable container for recycle or disposal.

Slurry spills should be immediately contained (to minimize release). Use proper personal protective equipment. Do not flush to sewer or allow to enter waterways.

Dampen with water spray or use other methods to clean spill which avoid creating dust. Discard empty packaging promptly. Avoid excessive handling of empty packaging, which may result in unnecessary release of airborne particulates.

SECTION 7 - HANDLING AND STORAGE

Precautionary Measures:

Wear skin and eye protection to avoid contact with dust or spray.

Avoid contact with eyes, skin and clothing.

Avoid creating and inhaling airborne dust or particulates.

Use only with adequate ventilation.

Wash clothing before reuse.

Equip mixers with dust covers.

Provide respiratory protection if needed.

FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

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SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT

EXPOSURE GUIDELINES (US)

Ingredient	ACGIH TLV			OSHA PEL			Other
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	
Portland cement	10 mg/m ³ TWA (particulate matter containing no asbestos and < 1% crystalline silica)	-	-	10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	-	-	-
Quartz	0.05 mg/m ³ TWA (respirable fraction)	-	-	0.1 mg/m ³ TWA (respirable dust)	-	-	-
Vermiculite	-	-	-	-	-	-	-

In addition to the exposure limits referenced above, the following non-specific limits for dust apply to this product; OSHA, 15 mg/m³-TWA or Total Dust and 5 mg/m³-TWA as Respirable Dust, ACGIH, 10 mg/m³-TWA as Total Dust and 3 mg/m³-TWA as Respirable Dust.

EXPOSURE GUIDELINES (CANADA)

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

Engineering Controls:

Not generally required.

Personal Protective Equipment:

Respiratory Protection: Respiratory protection may be desirable if dust is created in handling and is required at or above the Permissible Exposure Limits (PELs) specified.

Skin Protection: Gloves are recommended.

Eye Protection: Safety glasses or goggles should be worn.

Work/Hygienic Practices: Use good personal hygiene practices.

Use bag opening and disposal procedures which minimize dust release. Equip mixers with dust covers to minimize dust released during mixing cycle. After each work shift, workers should shower with soap and water. Work clothing should be changed daily.

Quartz (Crystalline silica) is a naturally-occurring mineral that is commonly contained in 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 fractions of large, nonrespirable sized particles and of respirable sized particles (less than ten microns in aerodynamic diameter). It is only the respirable fraction of total quartz that is recognized as hazardous by professionals in the field of Occupational Health and by most regulatory agencies.

Portland Cement may contain trace amounts of heavy metals recognized as carcinogens by NTP, OSHA or IARC. This product contains compounds subject to exposure guidelines and/or identified as carcinogens. (See Sections 8 and 11).

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Powder
Appearance/Odor:	Coarse, free flowing grey powder, no odor.
Odor Threshold: (ppm)	Not Determined
pH:	11-13 for Portland Cement
Vapor Pressure: (Mm Hg)	Not Applicable
Vapor Density: (Air = 1)	Not Applicable
Solubility In Water:	Slight
Specific Gravity: (Water = 1)	Not Applicable
Evaporation Rate: (Butyl Acetate = 1)	Not Applicable
Boiling Point:	Not Applicable
Viscosity:	Unknown
Bulk Density: (Pounds/Cubic Foot)(Pcf)	22-24
% Volatiles (gr/L): (70°F) (21°C)	Not Applicable

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:	Stable
Conditions To Avoid:	None known
Hazardous Polymerization:	Will not polymerize.
Hazardous Decomposition Products:	Carbon dioxide, Carbon monoxide and trace amounts of nitrogen and asphyxiants.

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

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
Formaldehyde	000050-00-0	.00034
Quartz	014808-60-7	2.735

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

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
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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	Yes	No	Yes	Yes	Yes	Yes	Yes

SECTION 16 - OTHER INFORMATION

Non-Hazardous Ingredient Disclosure:

Chemical Name

CAS Number

Prepared by: EH&S Department
Approved by: EH&S Department
Approved Date: 05/18/2004

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."