

W. R. GRACE
MATERIAL SAFETY DATA SHEET

Product Name: Barrier Coat II Flat
MSDS ID Number: Z-01779

MSDS Date: 05/14/2010

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Barrier Coat II Flat
MSDS Number: Z-01779
Cancelled MSDS Number: Z-01678
MSDS Date: 05/14/2010
Chemical Family Name: Filled Styrene Acrylic Copolymer Emulsion
Product Use: Lead Encapsulant Coating
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)
1,2-Propylene glycol	000057-55-6	1-10
2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate	029129-78-0	10-25
Chlorothalonil	001897-45-6	< 1
Kaolin	001332-58-7	25-50
Titanium dioxide	013463-67-7	1-10
Zinc oxide	001314-13-2	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 kidney tumors.

HMIS Rating:

Health: 2*
Flammability: 0
Reactivity: 0
Personal Protective Equipment: H (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.

Prolonged inhalation may cause respiratory tract irritation.

Effects include: Flu-like symptoms (metal fume fever).

Eye Contact: Spray applications of this material may create aerosols, which may be irritating to the eyes.

Prolonged eye contact can cause redness, itching, conjunctivitis and corneal damage.

Skin Contact: Skin contact causes irritation.

Prolonged skin contact can result in irritation causing redness and itching.

May cause sensitization.

Skin Absorption: May cause effects similar to those defined under ingestion.

Ingestion: Oral toxicity is believed to be low.

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

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Effects include: Nausea, fatigue, vomiting and diarrhea.
Chlorothalonil contained in this product has been shown to produce kidney tumors in laboratory animal studies.

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: Not Applicable
Flammability: Not Applicable
Reactivity: Not Applicable

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.
No special procedures specific to this product.
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.

SECTION 7 - HANDLING AND STORAGE

Precautionary Measures: Avoid contact with eyes, skin and clothing.
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	
1,2-Propylene glycol	-	-	-	-	-	-	-
2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate	-	-	-	-	-	-	-
Kaolin	2 mg/m ³ TWA (respirable fraction) (The value is for particulate matter)	-	-	total dust: 10 mg/m ³ TWA; respirable fraction: 5 mg/m ³ TWA	-	-	-
Titanium dioxide	10 mg/m ³ TWA	-	-	total dust: 10 mg/m ³ TWA	-	-	-

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Zinc oxide	5 mg/m3 TWA (fume); 10 mg/m3 TWA (dust) (The value for Zinc oxide	10 mg/m3 STEL (fume)	-	fume: 5 mg/m3 TWA; total dust: 10 mg/m3 TWA; respirable fraction: 5 mg/m3 TWA	fume: 10 mg/m3 STEL	-	-
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Titanium dioxide can result in lung disease (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.

Work/Hygenic 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).

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Appearance/Odor:	White liquid, mild latex odor.
Odor Threshold: (ppm)	Not Available
pH:	8-10
Vapor Pressure: (Mm Hg)	Not Available
Vapor Density: (Air = 1)	<1.0
Solubility In Water:	Appreciable
Specific Gravity: (Water = 1)	Not Available
Evaporation Rate: (Butyl Acetate = 1)	>1.0
Boiling Point:	>212°F/100°C
Viscosity:	Not Available
Bulk Density: (Pounds/Cubic Foot)(Pcf)	Not Available
% Volatiles (gr/L): (70°F) (21°C)	46%

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:	Stable
Conditions To Avoid:	Heat, Strong oxidizers, magnesium, rubber and linseed oil.
Hazardous Polymerization:	Will not polymerize.
Hazardous Decomposition Products:	Carbon dioxide, Carbon monoxide and toxic fumes of zinc oxide.

SECTION 11 - TOXICOLOGICAL INFORMATION

<u>Ingredient(No data unless listed.)</u>	<u>CAS Number</u>	<u>LD50 and LC50</u>
1,2-Propylene glycol	000057-55-6	Oral LD50 Rat : 20 gm/kg; Oral LD50 Mouse : 22 gm/kg;
Zinc oxide	001314-13-2	Inhalation LC50 Mouse : 2500 mg/m3; Oral LD50 Mouse : 7950 mg/kg

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Carcinogenicity:

Ingredient	IARC Group 1	IARC Group 2A	IARC Group 2B	NTP Known	NTP Suspect	OSHA
1,2-Propylene glycol	No	No	No	No	No	No
2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate	No	No	No	No	No	No
Chlorothalonil	No	No	Yes	No	No	No
Kaolin	No	No	No	No	No	No
Titanium dioxide	No	No	Yes	No	No	No
Zinc oxide	No	No	No	No	No	No

Chlorothalonil contained in this product has been shown to produce kidney tumors in laboratory animal studies. Titanium dioxide can result in lung disease (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.

Mutagenicity: Not applicable.
Teratogenicity: Not applicable.
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>
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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>
Acrylonitrile	000107-13-1	.0004101
Ammonia	007664-41-7	.14802
Cadmium	007440-43-9	.0001675
Chlorothalonil	001897-45-6	.16564
Zinc Compounds	RR-00578-7	3.35%

National Volatile Organic Compound Emission Standards For Architectural Coatings:

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Volatile Organic Content: (gr/L) 41 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>
Acrylonitrile	000107-13-1	.0004101
Ammonia	007664-41-7	.14802
Cadmium	007440-43-9	.0001675
Chlorothalonil	001897-45-6	.16564

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

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
Ammonia	007664-41-7	.14802
Chlorothalonil	001897-45-6	.16564

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	Not Determined	Yes	Not Determined	Yes	Yes

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: 05/14/2010

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."