

PR 2001 B2-4-502-5N

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part A
FM5304E

Effective Date: 05/26/2000

SECTION I - MANUFACTURER AND PRODUCT INFORMATION

PRC-DeSoto International, Inc.
A PPG Industries Company
5430 San Fernando Road
P.O. Box 1800
Glendale, CA 91209

Information Phone: (818) 240-2060
Emergency Phone: (800) 228-5635
CHEMTREC: (800) 424-9300

Trade Name: PR-2001 B-2, Part A
Accelerator component
Product Code: FM5304E
Form ID No: A06
Product Class: Epoxy resin mixture
Synonyms: S-5304

HMIS HAZARD RATING
HEALTH - 2
FLAMMABILITY - 1
REACTIVITY - 0
PPE - H
None (0) --->Extreme (4)

SECTION II - COMPOSITION

INGREDIENTS INFORMATION

CAS NUMBER	Wt %	CHEMICAL IDENTITY
001317-65-3	30 - 60	Limestone
028064-14-4	10 - 30	Polymer of Epichlorohydrin, Phenol-Formaldehyde Nov
025068-38-6	10 - 30	Bisphenol, A/Epichlorohydrin Based Epoxy Resin
061788-32-7	1 - 10	Hydrogenated Terphenyl
002530-83-8	< 5	Gamma-Glycidoxypropyltrimeth-oxysilane
026140-60-3	< 5	Terphenyls
001333-86-4	< 2	Carbon Black

EXPOSURE LIMITS

CAS NUMBER	EXPOSURE LIMITS (ppm)				
	ACGIH TLVs		OSHA PELs		
	TWA	STEL	TWA	STEL	
001317-65-3	10 mg/m3	N/E	N/E	N/E	S
028064-14-4	N/E	N/E	N/E	N/E	
025068-38-6	N/E	N/E	N/E	N/E	
061788-32-7	0.5	N/E	0.5	N/E	S
002530-83-8	N/E	N/E	N/E	N/E	
026140-60-3	0.5	N/E	0.5	N/E	S
001333-86-4	3.5 mg/m3	N/E	3.5 mg/m3	N/E	S

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part A
FM5304E

Effective Date: 05/26/2000

Footnotes

(S) Occupational Exposure Standard
(R) Supplier's Recommended Limit

N/Av = Not Available

N/Ap = Not Applicable

N.E. = Not Established

NotknownXXX = CAS Number is not known.

SECTION III - HAZARDS IDENTIFICATION

Permissible Exposure Limits for Product:

Not established for product. See Section II.

ROUTE OF ENTRY AND EFFECTS OF OVEREXPOSURE

ROUTE OF ENTRY:

Inhalation and dermal.

INHALATION:

Vapor or fume will irritate the nose and throat.

EYE CONTACT:

Vapor or fume can irritate the eyes.

SKIN CONTACT:

Substance can cause moderate irritation.

INGESTION:

Ingestion can cause irritation of gastro-intestinal tract.

Contains an ingredient listed as known or suspected carcinogen?

NTP: No

OSHA: No

IARC: Yes

SECTION IV - FIRST AID MEASURES

INHALATION:

If inhaled, remove from area to fresh air. If not breathing, give artificial respiration. Get immediate medical attention. If breathing is difficult, transport to medical facility and, if available, give supplemental oxygen.

EYE CONTACT:

For eye contact, immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. Get immediate medical attention.

SKIN CONTACT:

For skin contact, wipe excess material with dry towel. Then wash

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part A
FM5304E

Effective Date: 05/26/2000

exposed areas with plenty of water, and soap if available, for several minutes. Get medical attention if irritation occurs.

INGESTION:

If swallowed dilute by giving two(2) glasses of water to drink. Get immediate medical attention. Never give anything by mouth to an unconscious person.

GENERAL:

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

SECTION V - FIRE AND EXPLOSION HAZARD IDENTIFICATION

FLASHPOINT: > 200 F Method: Setaflash

LEL (%): N/Av UEL (%): N/AV

FLAMMABILITY CLASSIFICATION:

Not flammable.

FIRE AND EXPLOSION HAZARDS:

Decomposition and combustion products may be hazardous. No unusual hazards known.

EXTINGUISHING MEDIA:

Carbon dioxide, dry chemical, foam, water fog.

FIRE FIGHTING PROCEDURES:

Use complete personal protection. Use water to cool heat exposed containers.

SECTION VI - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Cover with absorbent material if necessary. Scoop into containers. Clean up residue with a suitable cleaning solvent. Wear appropriate personal protective equipment (See Section VIII).

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part A
FM5304E

Effective Date: 05/26/2000

SECTION VII - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Keep container tightly closed. Store in a dry location. Wear proper personal protective equipment (See Section VIII). Wash thoroughly after handling and before smoking or eating.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Good general mechanical ventilation.

RESPIRATORY PROTECTION:

Not normally required.

EYE PROTECTION:

Safety glasses.

SKIN PROTECTION:

Chemically resistant gloves.

GENERAL:

Safety shower, eye wash station and washing facilities should be available. When using in circumstances where skin contact is likely, use complete protective garments.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Black
Physical State:	Paste
Low Boiling Point:	500 F 259.97 C
High Boiling Point:	644 F 339.97 C
Evaporation Rate:	Slower than n-butyl acetate
Vapor Density:	Heavier than air
% Volatiles by Volume:	.3
Specific Gravity:	1.45
Liquid Density:	Heavier than water
Weight Per Gallon:	12.08
VOC (GR/L):	0.06
VOC (GR/L, Combined):	0.18

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part A
FM5304E

Effective Date: 05/26/2000

SECTION X - STABILITY AND REACTIVITY

STABILITY:

Stable.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITY:

Strong oxidizing agents, strong acids.

CONDITIONS TO AVOID:

See incompatibilities above.

HAZARDOUS DECOMPOSITION PRODUCTS:

Products of combustion are hazardous including carbon monoxide,
carbon dioxide, and oxides of nitrogen.

SECTION XI - TOXICOLOGICAL INFORMATION

ACUTE ORAL, DERMAL AND INHALATION EFFECTS (LD50 AND LC50):

CAS NUMBER	LD50	LC50
001317-65-3	6450 mg/kg, oral, rat	N/AV.
028064-14-4	4000 mg/kg, oral, rat	N/AV.
025068-38-6	11400 mg/kg, oral, rat	N/AV.
061788-32-7	10000 mg/kg, oral, rat	4.7 mg/L, rat, 4hr.
002530-83-8	23000 mg/kg, oral, rat	N/AV.
026140-60-3	10000 mg/kg, oral, rat	4.7 mg/L, rat, 4hr.
001333-86-4	440 mg/kg, oral, rat	6750 mg/m3, rat, 4hr.

Carcinogenicity:

Carbon Black:

Based on an IARC conclusion that there is "sufficient evidence in experimental animals for the carcinogenicity of carbon black" and inadequate evidence of carcinogenicity in humans. IARC's overall evaluation is that "carbon black is possibly carcinogenic to humans" (Group 2B).

Carbon black has not been listed as a carcinogen by National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety & Health (NIOSH) criteria document on carbon black recommends that only carbon blacks with PAH levels greater than

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part A
FM5304E

Effective Date: 05/26/2000

0.1% be considered suspect carcinogens.

NOTICE:

There are no data available on the product itself.

SECTION XII - ECOLOGICAL INFORMATION

NOTICE:

There are no data available on the product itself.

SECTION XIII - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

When disposing of this material, ensure that it is packaged,
stored, transported, and otherwise handled in accordance with
local, state, and federal regulations.

SECTION XIV - TRANSPORT INFORMATION

DOT (Non-Bulk):

PROPER SHIPPING NAME: Not regulated
HAZARD CLASS: Not Applicable
UN NUMBER: Not Available

SPECIAL NOTES:

None

SECTION XV - REGULATORY INFORMATION

TSCA Section 8(b) - Inventory Status:

All ingredients in this product are listed in the TSCA Inventory or
are exempt from listing.

CANADIAN EPA - DSL Inventory Status:

The DSL status of this product is unknown at this time.

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part A
FM5304E

Effective Date: 05/26/2000

SARA Title III Section 313 - Toxic Chemical List (TCL):

This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).

SARA Title III Section 302 - CERCLA:

This product contains no chemical regulated under Section 302 as extremely hazardous chemicals for emergency release notification (CERCLA List).

CALIFORNIA PROPOSITION 65 - Reportable ingredients:

Chemicals known by the state of CA to cause cancer:

This product does not contain any chemicals currently on the California list of known carcinogens.

Chemicals known by the state of CA to cause reproductive toxicity:

This product does not contain any chemicals currently on the California list of known Reproductive Toxins.

TSCA Section 12(b) - Export Notification:

This product does not contain any chemicals subject to Section 12(b) export notification.

CLEAN AIR ACT - Hazardous Air Pollutants (CAA Section 112):

This product contains the following chemicals regulated under Section 112 for National Emission Standards of Hazardous Air Pollutants notification.

000067-56-1 Methyl Alcohol

Pennsylvania Right to Know - Reportable Ingredients:

The following is required composition information. Also, review Section II for additional information for other chemicals.

001317-65-3 Limestone
001333-86-4 Carbon Black
026140-60-3 Terphenyls
061788-32-7 Hydrogenated Terphenyl

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part A
FM5304E

Effective Date: 05/26/2000

New Jersey Right to Know - Reportable Ingredients:

The following is required composition information. Also, review Section II for additional information for other chemicals.

001333-86-4 Carbon Black

SECTION XVI - OTHER INFORMATION

Effective Date: 05/26/2000 Supersedes Date: 05/26/2000

Revision Number: 02

Revision Reason: Formula Update

The information in this MSDS was obtained from sources which we believe to be reliable. However, since much of the information has been received from sources outside the company, it is provided without any warranty, expressed or implied, regarding its correctness, or suitability for specific situations. The conditions of handling, storage, use, and disposal of this product are beyond our control and may be beyond our knowledge. The user has the sole responsibility to determine the suitability of the material for any use, and the manner and conditions of use. Therefore, we cannot assume responsibility and expressly disclaim liability for loss, damage, injury, or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials.

End of Document

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part B
FM5312

Effective Date: 02/05/07

SECTION I - MANUFACTURER AND PRODUCT INFORMATION

PRC-DeSoto International, Inc.
A PPG Industries Company
5430 San Fernando Road
P.O. Box 1800
Glendale, CA 91209

Information Phone: (818) 240-2060
Emergency Phone: (800) 228-5635
Outside of USA: +(651) 632-9265
CHEMTREC: (800) 424-9300

Trade Name: PR-2001 B-2, Part B
Base component
Product Code: FM5312
Form ID No: A12
Product Class: Filled polythioether
Synonyms: P-5312

HMIS HAZARD RATING
HEALTH - 1
FLAMMABILITY - 1
REACTIVITY - 0
PPE - G
None (0) --->Extreme (4)

SECTION II - COMPOSITION

INGREDIENTS INFORMATION

CAS NUMBER	Wt %	CHEMICAL IDENTITY
REF00000005	30 - 60	Thiol terminated polythioetherpolyether
000471-34-1	30 - 60	Calcium Carbonate
021645-51-2	1 - 10	Aluminum Hydroxide
013463-67-7	< 2	Titanium Dioxide @

EXPOSURE LIMITS

EXPOSURE LIMITS (ppm)

CAS NUMBER	ACGIH TLVs		OSHA PELs		
	TWA	STEL	TWA	STEL	
REF00000005	N/E	N/E	N/E	N/E	
000471-34-1	10 mg/M3	N/E	15 mg/M3	N/E	S
021645-51-2	2 mg/m3	N/E	N/E	N/E	
013463-67-7	10 mg/m3	N/E	10 mg/m3	N/E	S

Footnotes

(S) Occupational Exposure Standard
(R) Supplier's Recommended Limit

N/Av = Not Available
N.E. = Not Established

N/Ap = Not Applicable
NotknownXXX = CAS Number is not known.

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part B
FM5312

Effective Date: 02/05/07

SECTION III - HAZARDS IDENTIFICATION

Permissible Exposure Limits for Product:
Not established for product. See Section II.

ROUTE OF ENTRY AND EFFECTS OF OVEREXPOSURE

ROUTE OF ENTRY:

Inhalation and dermal.

INHALATION:

Substance is not likely to be hazardous by inhalation.

EYE CONTACT:

Substance may cause irritation.

SKIN CONTACT:

Substance may cause minor irritation on repeated exposure.

INGESTION:

Substance may be harmful if swallowed.

Contains an ingredient listed as known or suspected carcinogen?

NTP: No OSHA: No IARC: Yes

SECTION IV - FIRST AID MEASURES

INHALATION:

If inhaled, remove from area to fresh air. If not breathing, give artificial respiration. Get immediate medical attention. If breathing is difficult, transport to medical facility and, if available, give supplemental oxygen.

EYE CONTACT:

For eye contact, immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. Get immediate medical attention.

SKIN CONTACT:

For skin contact, wipe excess material with dry towel. Then wash exposed areas with plenty of water, and soap if available, for several minutes. Get medical attention if irritation occurs.

INGESTION:

If swallowed dilute by giving two(2) glasses of water to drink. Get immediate medical attention. Never give anything by mouth to an unconscious person.

GENERAL:

In all cases of doubt, or when symptoms persist, seek medical

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part B
FM5312

Effective Date: 02/05/07

attention. Never give anything by mouth to an unconscious person.

SECTION V - FIRE AND EXPLOSION HAZARD IDENTIFICATION

FLASHPOINT: >200 F Method: Setflash
LEL (%): N/Av UEL (%): N/Av

FLAMMABILITY CLASSIFICATION:
Not flammable.

FIRE AND EXPLOSION HAZARDS:

Decomposition and combustion products may be hazardous. No unusual hazards known.

EXTINGUISHING MEDIA:

Carbon dioxide, dry chemical, foam, water fog.

FIRE FIGHTING PROCEDURES:

Use complete personal protection. Use water to cool heat exposed containers.

SECTION VI - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Cover with absorbent material if necessary. Scoop into containers. Clean up residue with a suitable cleaning solvent. Wear appropriate personal protective equipment (See Section VIII).

SECTION VII - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Keep container tightly closed. Store in a dry location. Wear proper personal protective equipment (See Section VIII). Wash thoroughly after handling and before smoking or eating.

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part B
FM5312

Effective Date: 02/05/07

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Good general mechanical ventilation.

RESPIRATORY PROTECTION:

Not normally required.

EYE PROTECTION:

Safety glasses.

SKIN PROTECTION:

Chemically resistant gloves.

GENERAL:

Safety shower, eye wash station and washing facilities should be available. When using in circumstances where skin contact is likely, use complete protective garments.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Cream
Physical State:	Paste
Low Boiling Point:	N/Av
High Boiling Point:	N/Av
Evaporation Rate:	Non-volatile
Vapor Density:	Non-volatile
% Volatiles by Volume:	.06
Specific Gravity:	1.42
Liquid Density:	Heavier than water
Weight Per Gallon:	11.83
VOC (GR/L):	0.2
VOC (GR/L, Combined):	0.18

SECTION X - STABILITY AND REACTIVITY

STABILITY:

Stable.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITY:

Strong oxidizing agents.

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part B
FM5312

Effective Date: 02/05/07

CONDITIONS TO AVOID:

See incompatibilities above.

HAZARDOUS DECOMPOSITION PRODUCTS:

Oxides of carbon and nitrogen, sulfur dioxide, traces of hydrogen sulfide.

SECTION XI - TOXICOLOGICAL INFORMATION

ACUTE ORAL, DERMAL AND INHALATION EFFECTS (LD50 AND LC50):

CAS NUMBER	LD50	LC50
REF00000005	N/Av	N/Av
000471-34-1	2000 mg/kg, oral, rat	N/AV.
021645-51-2	N/AV.	N/AV.
013463-67-7	7500 mg/kg, oral, rat	N/AV.

Carcinogenicity:

Titanium Dioxide:

This product contains titanium dioxide. Animals inhaling massive quantities of titanium dioxide dust in a long-term study developed lung tumors. Studies with humans involved in manufacture of this pigment indicate no increased risk of cancer from exposure.

NOTICE:

There are no data available on the product itself.

SECTION XII - ECOLOGICAL INFORMATION

NOTICE:

There are no data available on the product itself.

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part B
FM5312

Effective Date: 02/05/07

SECTION XIII - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

When disposing of this material, ensure that it is packaged, stored, transported, and otherwise handled in accordance with local, state, and federal regulations.

SECTION XIV - TRANSPORT INFORMATION

DOT (Non-Bulk):

PROPER SHIPPING NAME: Not regulated
HAZARD CLASS: Not Applicable
UN NUMBER: Not Available

SPECIAL NOTES:

None

SECTION XV - REGULATORY INFORMATION

TSCA Section 8(b) - Inventory Status:

All ingredients in this product are listed in the TSCA Inventory or are exempt from listing.

CANADIAN EPA - DSL Inventory Status:

Contains components not listed on the DSL or NDSL.

SARA Title III Section 313 - Toxic Chemical List (TCL):

This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).

SARA Title III Section 302 - CERCLA:

This product contains no chemical regulated under Section 302 as extremely hazardous chemicals for emergency release notification (CERCLA List).

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part B
FM5312

Effective Date: 02/05/07

CALIFORNIA PROPOSITION 65 - Reportable ingredients:

Chemicals known by the state of CA to cause cancer:

This product contains the following chemical which is known to the state of California to cause cancer.

000050-00-0 Formaldehyde

Chemicals known by the state of CA to cause reproductive toxicity:

This product does not contain any chemicals currently on the California list of known Reproductive Toxins.

TSCA Section 12(b) - Export Notification:

This product contains following chemical that required annual or one time export notification per chemical and per country.

000108-95-2 Phenol

CLEAN AIR ACT - Hazardous Air Pollutants (CAA Section 112):

This product contains the following chemicals regulated under Section 112 for National Emission Standards of Hazardous Air Pollutants notification.

000050-00-0 Formaldehyde
000108-95-2 Phenol

Pennsylvania Right to Know - Reportable Ingredients:

The following is required composition information. Also, review Section II for additional information for other chemicals.

New Jersey Right to Know - Reportable Ingredients:

The following is required composition information. Also, review Section II for additional information for other chemicals.

013463-67-7 Titanium Dioxide @

MATERIAL SAFETY DATA SHEET

PR-2001 B-2, Part B
FM5312

Effective Date: 02/05/07

SECTION XVI - OTHER INFORMATION

Effective Date: 02/05/07 Supersedes Date: 10/11/2002
Revision Number: 04
Revision Reason: Formula & TiO2 Update

The information in this MSDS was obtained from sources which we believe to be reliable. However, since much of the information has been received from sources outside the company, it is provided without any warranty, expressed or implied, regarding its correctness, or suitability for specific situations. The conditions of handling, storage, use, and disposal of this product are beyond our control and may be beyond our knowledge. The user has the sole responsibility to determine the suitability of the material for any use, and the manner and conditions of use. Therefore, we cannot assume responsibility and expressly disclaim liability for loss, damage, injury, or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials.

End of Document