

MATERIAL SAFETY DATA SHEET

PR-1440 B-4, Part A  
FM0644D

Effective Date: 05/04/10

SECTION I - MANUFACTURER AND PRODUCT INFORMATION

PRC-DeSoto International, Inc.  
A PPG Industries Company  
12780 San Fernando Road  
Sylmar, CA 91342

Information Phone: (818) 362-6711  
Emergency Phone: (412) 434-4515  
Outside of USA: +(412) 434-4515  
CHEMTREC: (800) 424-9300

Trade Name: PR-1440 B-4, Part A  
Accelerator component  
Product Code: FM0644D  
Form ID No: A30  
Product Class: Manganese dioxide dispersion  
Synonyms: S-0644

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

SECTION II - COMPOSITION

INGREDIENTS INFORMATION

CAS NUMBER	Wt %	CHEMICAL IDENTITY
001313-13-9	30 - 60	Manganese Dioxide
061788-32-7	30 - 60	Hydrogenated Terphenyl
014807-96-6	< 5	Talc
026140-60-3	< 5	Terphenyls
001333-86-4	< 5	Carbon Black
000102-06-7	< 5	1,3-Diphenyl Guanidine
000120-54-7	< 5	Dipentamethylenethiuram tetrasulfide

EXPOSURE LIMITS

EXPOSURE LIMITS (ppm)

CAS NUMBER	ACGIH TLVs		OSHA PELs		
	TWA	STEL	TWA	STEL	
001313-13-9	0.2 mg/m3	N/E	5	N/E	S
061788-32-7	0.5	N/E	0.5	N/E	S
014807-96-6	2 mg/m3	N/E	2 mg/m3	N/E	S
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
000102-06-7	10 mg/m3	N/E	15 mg/m3	N/E	S
000120-54-7	N/E	N/E	N/E	N/E	

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-1440 B-4, Part A  
FM0644D

Effective Date: 05/04/10

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 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.



MATERIAL SAFETY DATA SHEET

PR-1440 B-4, Part A  
FM0644D

Effective Date: 05/04/10

SECTION V - FIRE AND EXPLOSION HAZARD IDENTIFICATION

FLASHPOINT: N/App Method: Not Applicable  
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.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:  
Good general mechanical ventilation.  
RESPIRATORY PROTECTION:  
Wear respirator (MSHA/NIOSH or approved equivalent) suitable for concentrations and types of air contaminants encountered.  
EYE PROTECTION:  
Safety glasses.  
SKIN PROTECTION:  
Chemically resistant gloves.

MATERIAL SAFETY DATA SHEET

PR-1440 B-4, Part A  
FM0644D

Effective Date: 05/04/10

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:	N/Av
High Boiling Point:	N/Av
Evaporation Rate:	Non-volatile
Vapor Density:	Non-volatile
% Volatiles by Volume:	0
Specific Gravity:	1.76
Liquid Density:	Heavier than water
Weight Per Gallon:	14.66
VOC (GR/L):	N/App
VOC (GR/L, Combined):	15

SECTION X - STABILITY AND REACTIVITY

STABILITY:

Stable.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITY:

Easily oxidizable materials.

CONDITIONS TO AVOID:

See incompatibilities above.

HAZARDOUS DECOMPOSITION PRODUCTS:

Oxides of carbon and nitrogen, manganese compounds.



MATERIAL SAFETY DATA SHEET

PR-1440 B-4, Part A  
FM0644D

Effective Date: 05/04/10

SECTION XI - TOXICOLOGICAL INFORMATION

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

CAS NUMBER	LD50	LC50
001313-13-9	14900 mg/kg, oral, rat	N/AV.
061788-32-7	10000 mg/kg, oral, rat	4.7 mg/L, rat, 4hr.
014807-96-6	5000 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/m <sup>3</sup> , rat, 4hr.
000102-06-7	350 mg/kg, oral, rat	N/AV.
000120-54-7	2000 mg/kg, oral, rat	N/AV.

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 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.

MATERIAL SAFETY DATA SHEET

PR-1440 B-4, Part A  
FM0644D

Effective Date: 05/04/10

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:

All components are listed on the DSL.

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

This product contains a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372). This information must be included in all MSDS's copied or distributed for this product.

001313-13-9 Manganese Dioxide

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-1440 B-4, Part A  
FM0644D

Effective Date: 05/04/10

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.

001333-86-4 Carbon Black

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.

001313-13-9 Manganese Dioxide

Pennsylvania Right to Know - Reportable Ingredients:

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

001310-73-2 Sodium Hydroxide  
001333-86-4 Carbon Black  
014807-96-6 Talc  
026140-60-3 Terphenyls  
061788-32-7 Hydrogenated Terphenyl

New Jersey Right to Know - Reportable Ingredients:

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

001313-13-9 Manganese Dioxide  
001333-86-4 Carbon Black  
014807-96-6 Talc

-----  
MATERIAL SAFETY DATA SHEET

PR-1440 B-4, Part A  
FM0644D

Effective Date: 05/04/10  
-----

SECTION XVI - OTHER INFORMATION  
-----

Effective Date: 05/04/10      Supersedes Date: 05/29/2009  
Revision Number: 04  
Revision Reason: Formula & General 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-1440 B-4, Part B  
FM4084C

Effective Date: 10/25/07

SECTION I - MANUFACTURER AND PRODUCT INFORMATION

PRC-DeSoto International, Inc.  
A PPG Industries Company  
12780 San Fernando Road  
Sylmar, CA 91342

Information Phone: (818) 362-6711  
Emergency Phone: (412) 434-4515  
Outside of USA: +(412) 434-4515  
CHEMTREC: (800) 424-9300

Trade Name: PR-1440 B-4, Part B  
Base component  
Product Code: FM4084C  
Form ID No: A20  
Product Class: Filled Modified polysulfide resin  
Synonyms: P-4084

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
068611-50-7	30 - 60	Liquid Polysulphide Polymer with Thiol End Groups
000471-34-1	30 - 60	Calcium Carbonate
REF000000006	10 - 30	Modified polysulfide polymer
013463-67-7	< 5	Titanium Dioxide @
000108-88-3	< 5	Toluene

EXPOSURE LIMITS

CAS NUMBER	EXPOSURE LIMITS (ppm)				S
	ACGIH TLVs		OSHA PELs		
	TWA	STEL	TWA	STEL	
068611-50-7	N/E	N/E	N/E	N/E	
000471-34-1	10 mg/M3	N/E	15 mg/M3	N/E	S
REF000000006	N/E	N/E	N/E	N/E	
013463-67-7	10 mg/m3	N/E	10 mg/m3	N/E	S
000108-88-3	20	N/E	100	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-1440 B-4, Part B  
FM4084C

Effective Date: 10/25/07

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:

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.

DELAYED EFFECTS:

Repeated overexposure may cause central nervous system depression, kidney/liver damage, birth defects and reproductive toxicity.

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



MATERIAL SAFETY DATA SHEET

PR-1440 B-4, Part B  
FM4084C

Effective Date: 10/25/07

SECTION V - FIRE AND EXPLOSION HAZARD IDENTIFICATION

FLASHPOINT: N/App Method: Not Applicable  
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.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Good general mechanical ventilation.

RESPIRATORY PROTECTION:

Wear respirator (MSHA/NIOSH or approved equivalent) suitable for concentrations and types of air contaminants encountered.

EYE PROTECTION:

Safety glasses.

MATERIAL SAFETY DATA SHEET

PR-1440 B-4, Part B  
FM4084C

Effective Date: 10/25/07

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:	Beige
Physical State:	Paste
Low Boiling Point:	N/Av
High Boiling Point:	N/Av
Evaporation Rate:	Slower than n-butyl acetate
Vapor Density:	Heavier than air
% Volatiles by Volume:	1.2
Specific Gravity:	1.57
Liquid Density:	Heavier than water
Weight Per Gallon:	13.1
VOC (GR/L):	16
VOC (GR/L, Combined):	N/Av

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:

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



MATERIAL SAFETY DATA SHEET

PR-1440 B-4, Part B  
FM4084C

Effective Date: 10/25/07

SECTION XI - TOXICOLOGICAL INFORMATION

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

CAS NUMBER	LD50	LC50
068611-50-7	5000 mg/kg,oral,rat	N/AV.
000471-34-1	2000 mg/kg,oral,rat	N/AV.
REF00000006	N/Av	N/Av
013463-67-7	7500 mg/kg,oral,rat	N/AV.
000108-88-3	2600 mg/kg,oral,rat	8800 ppm,rat,4hr.

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.

Teratogenicity:

Toluene:

This product contains toluene. Toluene inhalation in animals (greater than 1500 ppm) and intentional inhalation of toluene containing products by humans (e.g. glue) has caused adverse fetal development effects. It has been reported in occupational studies that inhalation exposures to toluene are associated with reproductive effects including spontaneous abortion. However, the methodology and reliability of the results for the studies are questionable. Several other occupational studies indicated that toluene exposure has been associated with impaired color vision.

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-1440 B-4, Part B  
FM4084C

Effective Date: 10/25/07

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 listed on the NDSL.

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

This product contains a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372). This information must be included in all MSDS's copied or distributed for this product.

000108-88-3 Toluene

SARA Title III Section 302 - CERCLA:

This product contains the following chemicals regulated under Section 302 as extremely hazardous substance(s) for emergency release notification (CERCLA List).

000108-88-3 Toluene

1000



MATERIAL SAFETY DATA SHEET

PR-1440 B-4, Part B  
FM4084C

Effective Date: 10/25/07

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.

000071-43-2 Benzene

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

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

000071-43-2 Benzene  
000108-88-3 Toluene

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.

000071-43-2 Benzene  
000108-88-3 Toluene

Pennsylvania Right to Know - Reportable Ingredients:

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

000108-88-3 Toluene  
013463-67-7 Titanium Dioxide @

New Jersey Right to Know - Reportable Ingredients:

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

000108-88-3 Toluene  
013463-67-7 Titanium Dioxide @

MATERIAL SAFETY DATA SHEET

PR-1440 B-4, Part B  
FM4084C

Effective Date: 10/25/07

SECTION XVI - OTHER INFORMATION

Effective Date: 10/25/07      Supersedes Date: 10/21/2004  
Revision Number: 04  
Revision Reason: TiO2 and Toluene 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