Material Safety Data Sheet



Date of issue 21 June 2012

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Version

1. Product and	I. Product and company identification	
Product name	: ₱R-1826 B-1/2 Part A	
Code	: # 5352A	
Supplier	: PPG Aerospace PRC-DeSoto 12780 San Fernando Road Sylmar, CA 91342 Phone: 818 362 6711	
Emergency telephone number	: [412) 434-4515 (U.S.) (514) 645-1320 (Canada) 01-800-00-21-400 (Mexico)	

2. Hazards ide	ntification
Emergency overview	: WARNING!
	AUSES EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY BE HARMFUL IF INHALED OR SWALLOWED. SANDING AND GRINDING DUSTS MAY BE HARMFUL IF INHALED. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.
	So not swallow. Do not get on skin or clothing. Avoid contact with eyes. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Potential acute health effe	ects
Inhalation	: May be harmful if inhaled.
Ingestion	: May be harmful if swallowed.
Skin	: Fritating to skin. May cause an allergic skin reaction.
Eyes	: Fritating to eyes.
Over-exposure signs/sym	<u>ptoms</u>
Frimethoxysilanes are capa fatal or cause blindness.	able of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or
Medical conditions aggravated by over- exposure	: Pre-existing skin disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
	Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials IIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

3. Composition/information on ingredients

Name	CAS number	<u>%</u>
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	25068-38-6	30 - 60
Phenol, polymer with formaldehyde, glycidyl ether (MW<=700)	28064-14-4	10 - 30
calcium carbonate	471-34-1	10 - 30
Carbon black	1333-86-4	3 - 7
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8	1 - 5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.



Product name PR-1826 B-1/2 Part A

4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Ingestion	: Frswallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
Notes to physician	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product	: In a fire or if heated, a pressure increase will occur and the container may burst. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
Extinguishing media	
Suitable	: 🗾 Se an extinguishing agent suitable for the surrounding fire.
Not suitable	: None known.
Special exposure hazards	: Fromptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	: Decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions	Image: Mo action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
Environmental precautions	: Kvoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
Large spill	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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Product name PR-1826 B-1/2 Part A

7. Handling and storage

Handling

Fut on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not swallow. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Vapors are heavier than air and may spread along floors. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120F / 49C.

S

SR

SS

STEL

TD

TLV

TWA

= Potential skin absorption

= Respiratory sensitization

= Threshold Limit Value

= Time Weighted Average

= Short term Exposure limit values

= Skin sensitization

= Total dust

8. Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
calcium carbonate	TWA	10 MG/M3 TD 3 MG/M3 R	5 mg/m ³ R 15 mg/m ³ TD 5 mg/m3 R 15 mg/m3	Not established	Not established	Not established
Carbon black	TWA	- 3 mg/m³	3.5 mg/m ³	3.5 mg/m ³	3.5 mg/m ³	Not established
	STEL	Not established	Not established	Not established	7 mg/m³	Not established

Key to abbreviations

- A = Acceptable Maximum Peak
- ACGIH = American Conference of Governmental Industrial Hygienists.
 - C = Ceiling Limit

F = Fume

IPEL = Internal Permissible Exposure Limit

- OSHA = Occupational Safety and Health Administration.
- $\begin{array}{l} \mathsf{R} &= \mathsf{Respirable} \\ \mathsf{7} &= \mathsf{OSHA} \, 2\mathsf{9C} \end{array}$
 - = OSHA 29CFR 1910.1200 Subpart Z Toxic and Hazardous Substances

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures	: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
Engineering measures	: Wuser operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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Product name PR-1826 B-1/2 Part A

8. Exposure controls/personal protection

Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Personal protection	
Eyes	: Safety glasses with side shields.
Hands	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves	: butyl rubber
Respiratory	: Workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Skin	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

-		
Physical state	Zquid.	
	Paste.	
Flash point	Closed cup: 98.89°C (210°F) [Product does not sustain combustion.]	
Color	Black.	
Odor	Not available.	
рН	Not available.	
Boiling/condensation point	≫ 37.78°C (>100°F)	
Melting/freezing point	Not available.	
Specific gravity	1.36	
Density(lbs / gal)	11.35	
Vapor pressure	Not available.	
Vapor density	Not available.	
Evaporation rate	Not available.	
VOC	Not available.	
Solubility	nsoluble in the following materials: cold water.	
Partition coefficient: n- octanol/water	Not available.	
% Solid. (w/w)	100	

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Product name PR-1826 B-1/2 Part A

10. Stability and reactivity

Stability Conditions to avoid	 Stable under recommended storage and handling conditions (see Section 7). No specific data.
Materials to avoid	: Reactive or incompatible with the following materials:,acids,oxidizing materials,strong alkalis
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Vender normal conditions of storage and use, hazardous polymerization will not occur.

11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
eaction product: bisphenol-A- (epichlorhydrin); epoxy resin	LD50 Oral	Rat	>2 g/kg	-
	LD50 Dermal	Rabbit	>2 g/kg	-
calcium carbonate	LD50 Oral	Rat	6450 mg/kg	-
Carbon black	LD50 Oral	Rat	>15400 mg/kg	-
	LD50 Dermal	Rabbit	>3 g/kg	-
[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	LD50 Oral	Rat	7.01 g/kg	-
	LD50 Dermal	Rabbit	4.3 g/kg	-
	LC50 Inhalation	Rat	>5300 mg/m ³	4 hours
	Dusts and mists	6		
Conclusion/Summary : Not Chronic toxicity	available.	I	I	
Conclusion/Summary : Not	available.			
Con resp <u>Carcinogenicity</u>	tains material which cau tains material which may piratory tract. tains material which may	y cause damage t	to the following organs:	lungs, upper
	ends on duration and lev	el of exposure.		
Product/ingredient name	ACGIH	IARC	NTP	OSHA
Carbon black	A3	2B	-	-
	GIH: A1, A2, A3, A4, A5			
IAF NT OS	RC: 1, 2A, 2B, 3, 4 P: Proven, Possible HA: + t listed or regulated as a carc	inogen: -		
IAF NT OS No	RC: 1, 2A, 2B, 3, 4 P: Proven, Possible HA: + t listed or regulated as a carc	sinogen: -		
12. Ecological inform	RC: 1, 2A, 2B, 3, 4 P: Proven, Possible HA: + t listed or regulated as a carc		the environment if relea	ased in large
12 . Ecological inform	RC: 1, 2A, 2B, 3, 4 P: Proven, Possible HA: + t listed or regulated as a carc ation ter polluting material. M antities.		the environment if relea	ased in large

of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered



Product name PR-1826 B-1/2 Part A

13. Disposal considerations

when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

Regulation UN number		Proper shipping name	Classes	PG*	Additional information		
UN	3082	NVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	9	M			
IMDG	B 082	NVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S Marine pollutant (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin, Phenol, polymer with formaldehyde, glycidyl ether (MW <=700))	8	M			
DOT	3082	NVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.		JUT .	Reportable quantity 8510.6 lbs / 3863.8 kg [90. 329 gal / 341.93 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements		

PG* : Packing group

Reportable quantity RQ : ØERCLA: Hazardous substances.: No products were found.

15. Regulatory information

United States inventory (TSCA 8b)	、.		nts are listed or	overneted				
5 (•				
Australia inventory (AICS)		All componer	nts are listed or	exempted.				
Canada inventory (DSL)		🕅 componer	nts are listed or	exempted.				
China inventory (IECSC)		🕅 componer	nts are listed or	exempted.				
Europe inventory (REACH) : Please contact your supplier for information on the inventory status of this material.								
Japan inventory (ENCS)		Not determin	ed.					
Korea inventory (KECI)	:	🕅 componer	nts are listed or	exempted.				
New Zealand (NZIoC)	:	Scientific R&	D Filing in plac	e				
Philippines inventory (PICCS)		Not determin	ed.					
United States								
SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: Carbon black; calcium carbonate CERCLA: Hazardous substances.: No products were found.								
SARA 311/312 MSDS Distribution -	C	nemical Inven	tory - Hazard	dentification:				
Chemical name	9	<u>CAS #</u>	<u>Acute</u>	<u>Chronic</u>	<u>Fire</u>	Reactive	<u>Pressure</u>	

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Product name PR-1826 B-1/2 Pa	nrt A					
15. Regulatory inform	ation					
eaction product: bisphenol-A- epichlorhydrin); epoxy resin	25068-38-6	Y	Ν	Ν	Ν	N
Phenol, polymer with formaldehyde, lycidyl ether (MW<=700)	28064-14-4	Y	Ν	Ν	Ν	Ν
alcium carbonate	471-34-1	N	Ν	Ν	Ν	N
Carbon black	1333-86-4	N	Y	Ν	Ν	N
3-(2,3-epoxypropoxy)propyl] rimethoxysilane	2530-83-8	Y	Ν	Ν	Y	Ν
Product	as-supplied :	Y	V Y	N N	N	N N

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Canada

WHMIS (Canada)

: Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

<u>Mexico</u>

Classification

Flammability : 🕅 Health : 🔽 Reactivity : 🗖

16. Other information

Hazardous Material Information System (U.S.A.)

Health : 72 * Flammability : Physical hazards : 70

(*) - Chronic

effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

 Health :
 ✓2
 Flammability : ✓
 Instability : ✓

 Date of previous issue
 :
 8/14/2011.

 Organization that prepared
 :
 EHS

 the MSDS

✓ Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

