

# Material Safety Data Sheet



Date of issue 14 August 2011  
Version 3.02

## 1. Product and company identification

**Product name** : PR-1828 B-1/2 Part A  
**Code** : #4283A  
**Supplier** : PPG Aerospace PRC-DeSoto  
12780 San Fernando Road  
Sylmar, CA 91342  
**Emergency telephone number** : (412) 434-4515 (U.S.)  
(514) 645-1320 (Canada)  
01-800-00-21-400 (Mexico)

## 2. Hazards identification

**Emergency overview** : WARNING!  
CAUSES 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.  
Do 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 effects

**Inhalation** : May be harmful if inhaled.  
**Ingestion** : May be harmful if swallowed.  
**Skin** : Irritating to skin. May cause an allergic skin reaction.  
**Eyes** : Irritating to eyes.

### Over-exposure signs/symptoms

Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness.

**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.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

## 3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<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
[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.

## 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** : If swallowed, 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** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : Promptly 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** : No 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** : Avoid 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.

## 7. Handling and storage

- Handling** : Put 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 on skin or clothing. Avoid breathing vapor or mist. Avoid contact with eyes. Avoid release to the environment. 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.

## 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 <sup>3</sup> R 15 mg/m <sup>3</sup> TD 5 mg/m <sup>3</sup> R 15 mg/m <sup>3</sup>	Not established	Not established	Not established

### Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= 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.
- Engineering measures** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- 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.
- Gloves** : butyl rubber

## 8 . Exposure controls/personal protection

- Respiratory** : If 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** : Liquid.
- Flash point** : Closed cup: 98.89°C (210°F) [Product does not sustain combustion.]
- Color** : Purple.
- Odor** : Not available.
- pH** : 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.
- Volatility** : 0% (v/v), 0% (w/w)
- Evaporation rate** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- % Solid. (w/w)** : 100

## 10 . Stability and reactivity

- Stability** : Stable under recommended storage and handling conditions (see section 7).
- Conditions to avoid** : 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** : Under normal conditions of storage and use, hazardous polymerization will not occur.

## 11 . Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	LD50 Oral	Rat	>2 g/kg	-
	LD50 Dermal	Rabbit	>2 g/kg	-
calcium carbonate [3-(2,3-epoxypropoxy)propyl]trimethoxysilane	LD50 Oral	Rat	6450 mg/kg	-
	LD50 Oral	Rat	7.01 g/kg	-
	LD50 Dermal	Rabbit	4.3 g/kg	-

## 11 . Toxicological information

	LC50 Inhalation Vapor	Rat	>5300 mg/m <sup>3</sup>	4 hours
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- Conclusion/Summary** : Not available.  
**Chronic toxicity**  
**Conclusion/Summary** : Not available.  
**Target organs** : Contains material which causes damage to the following organs: skin, eyes.

## 12 . Ecological information

- Environmental effects** : Water polluting material. May be harmful to the environment if released in large quantities.

## 13 . Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal 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. Waste packaging should be recycled. Incineration or landfill should only be considered 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
<b>UN</b>	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	9	III	-
<b>IMDG</b>	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.. Marine pollutant (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin, Phenol, polymer with formaldehyde, glycidyl ether (MW<=700))	9	III	-
<b>DOT</b>	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	9	III	-

PG\* : Packing group  
Reportable quantity RQ : CERCLA: Hazardous substances.: No products were found.

## 15 . Regulatory information

United States inventory (TSCA 8b)	: All components are listed or exempted.
Australia inventory (AICS)	: All components are listed or exempted.
Canada inventory (DSL)	: All components are listed or exempted.
China inventory (IECSC)	: All components are listed or exempted.
Europe inventory (REACH)	: Please contact your supplier for information on the inventory status of this material.
Japan inventory (ENCS)	: At least one component is not listed.
Korea inventory (KECI)	: All components are listed or exempted.
New Zealand (NZIoC)	: Scientific R&D Filing in place Substance Use Restricted
Philippines inventory (PICCS)	: Not determined.

### 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: calcium carbonate

CERCLA: Hazardous substances.: No products were found.

### SARA 311/312 MSDS Distribution - Chemical Inventory - Hazard Identification:

Chemical name	CAS #	Acute	Chronic	Fire	Reactive	Pressure
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	25068-38-6	Y	N	N	N	N
Phenol, polymer with formaldehyde, glycidyl ether (MW<=700)	28064-14-4	Y	N	N	N	N
calcium carbonate	471-34-1	N	N	N	N	N
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8	Y	N	N	Y	N
Product as-supplied :		Y	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.

### Canada

WHMIS (Canada) : Class D-2B: Material causing other toxic effects (Toxic).

### Mexico

#### Classification

Flammability : 1 Health : 2 Reactivity : 0

## 16 . Other information

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

Health : 2 Flammability : 1 Physical hazards : 0

(\* ) - 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 : 1 Instability : 0

Date of previous issue : 7/2/2011.

Organization that prepared the MSDS : EHS

## 16 . Other information

✔ 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.*