# **Material Safety Data Sheet**



Date of issue

11 October 2011

Version

3

## 1. Product and company identification

Product name

: PR-1422 B-2 Part B

Code

: #4100B

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 identification

**Emergency overview** 

: DANGER!

COMBUSTIBLE LIQUID AND VAPOR. CAUSES RESPIRATORY TRACT AND EYE IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY BE HARMFUL IF INHALED OR SWALLOWED. SANDING AND GRINDING DUSTS MAY BE HARMFUL IF INHALED. ASPIRATION HAZARD. CAN ENTER LUNGS AND CAUSE DAMAGE. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

Keep away from heat, sparks and flame. Do not swallow. Do not get on skin or clothing. Avoid breathing vapor or mist. 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. Irritating to respiratory system. Can irritate eyes, nose, mouth

Ingestion : N

: May be harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and

cause damage.

Skin

Moderately irritating to the skin. May cause an allergic skin reaction.

Eyes

: Irritating to eves.

### Over-exposure signs/symptoms

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. **1-component preparations**: formaldehyde is released during curing. Formaldehyde may cause irreversible effects, is irritating to the mucous membranes and may cause skin sensitization.

Medical conditions aggravated by overexposure : 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)

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#### 3. Composition/information on ingredients

Name	CAS number	<u>%</u>
zálcium carbonate	471-34-1	7 - 13
toluene	108-88-3	1 - 5
proprietary modified polysulfide polymer	Not available.	1 - 5
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	25068-38-6	0.5 - 1.5
Terphenyl, hydrogenated	61788-32-7	0.5 - 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.

: Check for and remove any contact lenses. Immediately flush eyes with running water Eye contact 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.

Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is Inhalation

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.

: No specific treatment. Treat symptomatically. Contact poison treatment specialist Notes to physician

immediately if large quantities have been ingested or inhaled.

#### 5. Fire-fighting measures

: Combustible liquid. In a fire or if heated, a pressure increase will occur and the container Flammability of the product

may burst, with the risk of a subsequent explosion. 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 dry chemical, CO2, water spray (fog) or foam.

Not suitable : Do not use water let.

: Promptly isolate the scene by removing all persons from the vicinity of the incident if Special exposure hazards

there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water

spray to keep fire-exposed containers cool.

Hazardous combustion : Decomposition products may include the following materials: products

carbon oxides

halogenated compounds metal oxide/oxides Formaldehyde.

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.

#### Accidental release measures 6.

: No action shall be taken involving any personal risk or without suitable training. Personal precautions

Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. 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).

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### 6. Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. 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 in eyes or on skin or clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges, Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. 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 a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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/m³ R 15 mg/m³ TD 5 mg/m3 R 15 mg/m3	Not established	Not established	Not established
toluene	TWA	20 ppm	200 ppm Z	20 ppm	50 ppm S	Not established
	STEL	Not established	500 ppm Z A 300 ppm Z C	Not established	Not established	Not established
Terphenyl, hydrogenated	TWA	0.5 ppm	Not established	0.5 ppm	0.5 ppm	Not established

Key to abbreviations

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#### 8. Exposure controls/personal protection

Acceptable Maximum Peak = Potential skin absorption S **ACGIH** = American Conference of Governmental Industrial Hygienists SR Respiratory sensitization C F Ceilina Limit SS Skin sensitization = Fume STEL ■ Short term Exposure limit values

**IPEL** = Internal Permissible Exposure Limit □ Total dust TD

**OSHA** Occupational Safety and Health Administration, TLV ■ Threshold Limit Value R = Respirable TWA Time Weighted Average

= 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

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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

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: 70°C (158°F)

**Explosion limits** 

: Lower: 1.3%

Material supports

: Yes

combustion.

Color

: Brown

Odor

: Not available. : Not available.

Boiling/condensation point

: >37.78°C (>100°F)

Melting/freezing point

: Not available.

Specific gravity

: 1.38

Density ( lbs / gal )

: 11.52

Vapor pressure

: Not available.

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#### 9. Physical and chemical properties

Vapor density

: Not available.

Volatility

: 4% (v/v), 2% (w/w)

**Evaporation rate** 

: Not available.

Solubility

: Insoluble in the following materials: cold water.

Partition coefficient: n-

: Not available.

octanol/water

% Solid. (w/w)

: 98

## 10. Stability and reactivity

Stability

: Stable under recommended storage and handling conditions (see section 7).

Conditions to avoid

: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Materials to avoid

: Reactive or incompatible with the following materials: acids, oxidizing materials, strong

alkalis

Hazardous decomposition

products

: Formaldehyde.

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
calcium carbonate	LD50 Oral	Rat	6450 mg/kg	-
toluene	LD50 Oral	Rat	636 mg/kg	-
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LC50 Inhalation	Rat	49 g/m3	4 hours
reaction product: bisphenol-A-	LD50 Oral	Rat	>2 g/kg	-
(epichlorhydrin); epoxy resin		'		
	LD50 Dermal	Rabbit	>2 g/kg	-
Terphenyl, hydrogenated	LD50 Oral	Rat	>10000 mg/kg	-

Conclusion/Summary

Chronic toxicity

: Not available.

Conclusion/Summary

: Not available.

Defatting-irritant

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or

dermatitis.

Target organs

: Contains material which causes damage to the following organs: brain.

Contains material which may cause damage to the following organs: blood, kidneys, the reproductive system, liver, heart, gastrointestinal tract, upper respiratory tract, skin,

central nervous system (CNS), eye, lens or cornea.

### Carcinogenicity

### Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
toluene	A4	3	-	•	-	1

**Developmental effects** 

: Contains material which may cause developmental abnormalities, based on animal data.

Fertility effects

: Contains material which may impair female fertility, based on animal data.

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### 12. Ecological information

**Environmental effects** 

: No known significant effects or critical hazards.

### Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
toluene	Acute LC50 5800 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	96 hours
	Acute EC50 6000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Chronic NOEC 28000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
			1

## 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. 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

UN number	Proper shipping name	Classes	PG*	Additional information
None.	Not regulated,	None.	-	
None.	Not regulated.	None.	-	-
None,	Not regulated.	None.	-	-
	None.	None. Not regulated.	None. Not regulated. None.  None. Not regulated. None.	None. Not regulated. None  None. Not regulated

PG\*: Packing group

Reportable quantity RQ : CERCLA: Hazardous substances.: butanone: 5000 lbs. (2270 kg); toluene: 1000 lbs. (454 kg);

## 15. Regulatory information

United States inventory (TSCA 8b) : Not determined.
Australia inventory (AICS) : Not determined.
Canada inventory (DSL) : Not determined.
China inventory (IECSC) : Not determined.

**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) : Not determined.

New Zealand ( NZIoC ) : Substance Use Restricted Scientific R&D Filing in place

Philippines inventory (PICCS) : Not determined.

**United States** 

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### 15 . Regulatory information

United States - TSCA 5(e) - Substances consent order:

Phenol, polymer with formaldehyde

Listed

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: Terphenyl, hydrogenated; calcium carbonate; toluene

CERCLA: Hazardous substances.: butanone: 5000 lbs. (2270 kg); toluene: 1000 lbs. (454 kg);

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

Chemical name	CAS#	Acute	Chronic	<u>Fire</u>	Reactive	<u>Pressure</u>
zalcium carbonate	471-34-1	N	N	N	N	N
toluene	108-88-3	Υ	Υ	Υ	N	N·
proprietary modified polysulfide polymer	Not available.	Υ	N	N	N	Ń
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin	25068-38-6	Y	N	N	<b>N</b> .	N
Terphenyl, hydrogenated	61788-32-7	N	N	N	N	N
Produ	ct as-supplied :	Υ	Υ	Υ	N	N

**SARA 313** 

Chemical name

CAS number

Concentration

Supplier notification

toluene

108-88-3

1-5

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 Callfornia to cause birth defects or other reproductive harm.

Canada

WHMIS (Canada)

: Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C

(200°F). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B:

Material causing other toxic effects (Toxic).

Mexico

Classification

Flammability: 2

Health: 2

Reactivity: 0

## 16. Other information

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

Health :

Flammability: 2 Physical hazards:

(\*) - 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: 2

Instability: 0

Date of previous issue

: 6/16/2011.

Organization that prepared

the MSDS

 $m{ec{ec{ec{v}}}}$  Indicates information that has changed from previously issued version.

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### 16. Other information

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.