SAFETY DATA SHEET



Date of issue/Date of revision 27 July 2016 Version 1

| Section 1. Identification | | | |
|---|--|--|--|
| Product name | : PR 1784 B 1/2 BASE | | |
| Product code | : PR1784B1/2BA | | |
| Other means of identification | : Not available. | | |
| Product type | : Solid. | | |
| Relevant identified uses of | of the substance or mixture and uses advised against | | |
| Product use | : Industrial applications. | | |
| Use of the substance/ mixture | : Sealants | | |
| Uses advised against | : Not applicable. | | |
| Manufacturer | : PPG Aerospace PRC-DeSoto 12780 San Fernando Road Sylmar, CA 91342 | | |
| <u>Emergency telephone</u> <u>number</u> | Phone: 818 362 6711 : (412) 434-4515 (U.S.) (514) 645-1320 (Canada) 01-800-00-21-400 (Mexico) | | |

Section 2. Hazards identification

| OSHA/HCS status | : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). |
|--|---|
| Classification of the substance or mixture | : SKIN SENSITIZATION - Category 1 |
| | Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 16.1% |
| GHS label elements | |
| Hazard pictograms | |
| | |
| Signal word | : Warning |
| Hazard statements | : May cause an allergic skin reaction. |
| Precautionary statements | |

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Section 2. Hazards identification

| Prevention | : Wear protective gloves. Avoid breathing dust. Contaminated work clothing must not be allowed out of the workplace. |
|-------------------------------------|---|
| Response | : IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. |
| Storage | : Not applicable. |
| Disposal | Dispose of contents and container in accordance with all local, regional, national and international regulations. |
| Supplemental label elements | 1-component mixtures: formaldehyde is released during curing. Formaldehyde may cause irreversible effects, is irritating to the mucous membranes and may cause skin sensitization. Emits toxic fumes when heated. |
| Hazards not otherwise classified | : None known. |

Section 3. Composition/information on ingredients

| Substance/mixture | : | Mixture |
|-------------------|---|--------------------|
| Product name | : | PR 1784 B 1/2 BASE |

| Ingredient name | % | CAS number |
|-----------------|---|----------------------------------|
| [| | Not available. Not available. |

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

Occupational exposure limits, if available, are listed in Section 8.

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 Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

| Eye contact | Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice. |
|--------------|--|
| 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. |
| 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. |
| Ingestion | : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting. |

Most important symptoms/effects, acute and delayed

Potential acute health effects

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| Section 4. First a | id measures |
|----------------------------|---|
| Eye contact | : No known significant effects or critical hazards. |
| Inhalation | : No known significant effects or critical hazards. |
| Skin contact | : May cause an allergic skin reaction. |
| Ingestion | : No known significant effects or critical hazards. |
| Over-exposure signs/sym | <u>ptoms</u> |
| Eye contact | : No specific data. |
| Inhalation | : No specific data. |
| Skin contact | : Adverse symptoms may include the following: irritation redness |
| Ingestion | : No specific data. |
| Indication of immediate me | dical attention and special treatment needed, if necessary |
| Notes to physician | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments | : No specific treatment. |
| Protection of first-aiders | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |

See toxicological information (Section 11)

Section 5. Fire-fighting measures

| Extinguishing media | |
|--|---|
| Suitable extinguishing media | : Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media | : None known. |
| Specific hazards arising from the chemical | : This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. |
| Hazardous thermal decomposition products | : Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides |
| Special protective actions for fire-fighters | 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. |
| 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. |

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Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

| For non-emergency personnel | : | 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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. | | | |
|--------------------------------|-----|---|--|--|--|
| For emergency responders | : | If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". | | | |
| 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). | | | |
| Methods and materials for co | ont | ainment and cleaning up | | | |
| Small spill | : | Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. | | | |
| Large spill | : | Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. | | | |

Section 7. Handling and storage

| Precautions for safe handl | ing |
|--|--|
| Protective measures | : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. |
| Special precautions | : If this material is part of a multiple component system, read the 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. |
| Advice on general occupational hygiene | : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |

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Section 7. Handling and storage

| Conditions for safe storage, including any | : Do not store below the following temperature: 5°C (41°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool |
|--|--|
| incompatibilities | 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. |
| | |

Section 8. Exposure controls/personal protection

Control parameters

| | Occupat | ional | exposure | limits |
|--|---------|-------|----------|--------|
|--|---------|-------|----------|--------|

| Ingre | dient name | Exposure limits | |
|--------|--|---|--|
| propri | etary modified polysulfide polymer | None. | |
| propri | etary modified polysulfide polymer | None. | |
| | Key to abbreviatio | ns | |
| А | = Acceptable Maximum Peak | S = Potential skin absorption | |
| ACGIH | American Conference of Governmental Industrial Hygienists. | SR = Respiratory sensitization | |
| С | = 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 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

Consult local authorities for acceptable exposure limits.

| al monitoring may be required to determine the effectiveness of control measures and/or the necessity to use respiratory |
|---|
| , , , , , , , , , , , , , , , , , , , |
| Reference should be made to appropriate monitoring standards. Lidance documents for methods for the determination of will also be required. |
| |

| Appropriate engineering | : Good general ventilation should be sufficient to control worker exposure to airborne |
|-------------------------|--|
| controls | contaminants. |
| Environmental exposure | : Emissions from ventilation or work process equipment should be checked to ensure |
| controls | 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.

Individual protection measures

| 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. |
|---|---|
| Eye/face protection <u>Skin protection</u> | : Safety glasses with side shields. |

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Section 8. Exposure controls/personal protection

| Hand protection | : 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 |
| Body protection | : 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. |
| Other skin protection | : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Respiratory protection | : 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. 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. |

Section 9. Physical and chemical properties

| | | | United States | Page: 6/11 |
|--|-----|---|----------------------|------------|
| Viscosity | : | Kinematic (40°C (104°F)): Not applicable. | | |
| Partition coefficient: n- octanol/water | 1 | Not available. | | |
| Solubility | 4 | Insoluble in the following materials: cold water. | | |
| Density (lbs / gal) | 1 | 11.68 | | |
| Relative density | 1 | 1.4 | | |
| Vapor density | 1 | Not available. | | |
| Vapor pressure | 4 | Not available. | | |
| Evaporation rate | : | Not available. | | |
| Lower and upper explosive (flammable) limits | 1 | Not available. | | |
| Flammability (solid, gas) | 1 | Not available. | | |
| Decomposition temperature | 1 | Not available. | | |
| Auto-ignition temperature | 4 | Not available. | | |
| Material supports combustion. | 1 | Yes. | | |
| Flash point | | Closed cup: 23°C (73.4°F) | | |
| Boiling point | | Not available. | | |
| Melting point | 4 | Not available. | | |
| рН | 1 | Not available. | | |
| Odor threshold | : | Not available. | | |
| Odor | : | Not available. | | |
| Color | : | Beige. | | |
| Physical state | - 2 | Solid. | | |

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Section 9. Physical and chemical properties

VOC

% Solid. (w/w)

: 7 g/l : 99.5

Section 10. Stability and reactivity

| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
|------------------------------------|---|
| Chemical stability | : The product is stable. |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8. |
| Incompatible materials | : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids. |
| Hazardous decomposition products | : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen. |

Section 11. Toxicological information

Information on toxicological effects

| Acute toxicity | |
|----------------------------|--|
| Conclusion/Summary | : There are no data available on the mixture itself. |
| Irritation/Corrosion | |
| Conclusion/Summary | |
| Skin | : There are no data available on the mixture itself. |
| Eyes | : There are no data available on the mixture itself. |
| Respiratory | : There are no data available on the mixture itself. |
| Sensitization | |
| Conclusion/Summary | |
| Skin | : There are no data available on the mixture itself. |
| Respiratory | : There are no data available on the mixture itself. |
| Mutagenicity | |
| Conclusion/Summary | : There are no data available on the mixture itself. |
| Carcinogenicity | |
| Conclusion/Summary | : There are no data available on the mixture itself. |
| Reproductive toxicity | |
| Conclusion/Summary | : There are no data available on the mixture itself. |
| Teratogenicity | |
| Conclusion/Summary | : There are no data available on the mixture itself. |
| Specific target organ toxi | <u>city (single exposure)</u> |
| | |

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Section 11. Toxicological information

| Name | Category |
|---|--------------------------|
| proprietary modified polysulfide polymer proprietary modified polysulfide polymer | Category 3 Category 3 |

Specific target organ toxicity (repeated exposure)

Not available.

<u>Target organs</u>: Contains material which causes damage to the following organs: brain, central nervous system (CNS).

Contains material which may cause damage to the following organs: upper respiratory tract, skin, eyes.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Potential acute health effects

| Eye contact Inhalation Skin contact Ingestion | No known significant effects or critical hazards. No known significant effects or critical hazards. May cause an allergic skin reaction. No known significant effects or critical hazards. |
|--|---|
| Over-exposure signs/symp | |
| Eye contact | No specific data. |
| Inhalation | No specific data. |
| Skin contact | Adverse symptoms may include the following: irritation redness |
| Ingestion | : No specific data. |
| Delayed and immediate effect | cts and also chronic effects from short and long term exposure |
| Conclusion/Summary | : There are no data available on the mixture itself. 1-component mixtures: formaldehyde is released during curing. Formaldehyde may cause irreversible effects, is irritating to the mucous membranes and may cause skin sensitization. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. 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. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact. |
| Short term exposure | |
| Potential immediate effects | : There are no data available on the mixture itself. |
| Potential delayed effects | : There are no data available on the mixture itself. |

Product name PR 1784 B 1/2 BASE

Section 11. Toxicological information

| Long term exposure | |
|-------------------------------|---|
| Potential immediate effects | : There are no data available on the mixture itself. |
| Potential delayed effects | : There are no data available on the mixture itself. |
| Potential chronic health effe | <u>cts</u> |
| General | : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
| Carcinogenicity | : No known significant effects or critical hazards. |
| Mutagenicity | : No known significant effects or critical hazards. |
| Teratogenicity | : No known significant effects or critical hazards. |
| Developmental effects | : No known significant effects or critical hazards. |
| Fertility effects | : No known significant effects or critical hazards. |
| Numerical measures of toxic | <u>ity</u> |
| Acute toxicity estimates | |

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. 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. 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 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

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Product name PR 1784 B 1/2 BASE

Section 13. Disposal considerations

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

| | DOT | IMDG | IATA |
|--------------------------------|-----------------|-----------------|-----------------|
| UN number | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - |
| Transport hazard class (es) | - | - | - |
| Packing group | - | - | - |
| Environmental hazards | No. | No. | No. |
| Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. |

Additional information

| DOT | : None identified. |
|------|--------------------|
| IMDG | : None identified. |
| ΙΑΤΑ | : None identified. |

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

United States

United States inventory (TSCA 8b) : All components are listed or exempted.

| SARA 3 | 02/3 | <u>04</u> |
|--------|------|-----------|
| SARA | 304 | RQ |

: Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Product name PR 1784 B 1/2 BASE

Section 15. Regulatory information

| Name | | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|---|------------|----------------------------------|------------|--|--|
| proprietary modified polysulfide polymer proprietary modified polysulfide | No. No. | No. No. | No. No. | Yes. Yes. | No. No. |
| polymer | | | | | |

Section 16. Other information

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

Health : 2Flammability : 3Physical 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 Flammat Date of previous issue Organization that prepared | <pre>bility : 3 Instability : 0 : No previous validation : EHS</pre> |
|--|---|
| the MSDS | . Ello |
| Key to abbreviations | : ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations |
| V Indicates information that I | has shanged from providually issued version |

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.