

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name PR 1440 B 2 PART A
Synonym(s) NSN: 8030-00-753-4599 • NSN: 8030-66-132-8756 • PR-1440 B-2, PART A
PPG INDUSTRIES PR 1440 B 2 PART A • PR 1440 B 2 PART A - PRODUCT CODE

1.2 Uses and uses advised against

Use(s) SEALANT • TWO COMPONENT PACK

1.3 Details of the supplier of the safety data sheet

Supplier name PPG INDUSTRIES AUSTRALIA PTY. LTD. (ASC - AUSTRALIA)
Address 23 Ovata Drive, Tullamarine, VIC, Australia, 3043
Telephone (03) 9335 1557
Fax (03) 9335 3490
Email contact.aust@ppg.com
Website <http://www.ppg.com/coatings/aerospace/>

1.4 Emergency telephone number(s)

Emergency 1800 807 001

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

GHS Classification(s) Acute Toxicity: Oral: Category 4
Skin Corrosion/Irritation: Category 2
Skin Sensitization: Category 1
Serious Eye Damage / Eye Irritation: Category 2A
Acute Toxicity: Inhalation: Category 4
Aquatic Toxicity (Chronic): Category 2

2.2 Label elements

Signal word

WARNING

Pictograms



Hazard statement(s)

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H411 Toxic to aquatic life with long lasting effects.

Prevention statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment. This statement does not apply where this is the intended use.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response statement(s)

| | |
|------------------------------|--|
| Product name | PR 1440 B 2 PART A |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P312 | Call a POISON CENTER or doctor/physician if you feel unwell. |
| P321 | Specific treatment is advised - see first aid instructions. |
| P330 | Rinse mouth. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/attention. |
| P362 | Take off contaminated clothing and wash before re-use. |
| P391 | Collect spillage. |
| Disposal statement(s) | |
| P501 | Dispose of contents/container in accordance with relevant regulations. |

2.3 Other Hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

| Ingredient | CAS number | EC number | Content |
|---|------------|-----------|---------|
| MANGANESE DIOXIDE | 1313-13-9 | 215-202-6 | 30-60% |
| DIPHENYLGUANIDINE | 102-06-7 | 203-002-1 | 1-10% |
| SODIUM HYDROXIDE | 1310-73-2 | 215-185-5 | <1% |
| HYDROGENATED TERPHENYLS | 61788-32-7 | 262-967-7 | 10-30% |
| CARBON BLACK | 1333-86-4 | 215-609-9 | 1-10% |
| DIPENTAMETHYLENETHIURAM TETRASULPHIDE | 120-54-7 | 204-406-0 | 1-10% |
| TALC | 14807-96-6 | 238-877-9 | 1-10% |
| TERPHENYL | 26140-60-3 | 247-477-3 | 1-10% |
| ZEOLITE | 1318-02-1 | 215-283-8 | 1-10% |
| POLYETHYLENE GLYCOL MONO(OCTYLPHENYL) ETHER | 9036-19-5 | 618-541-1 | <1% |
| SODIUM STEARATE | 822-16-2 | 212-490-5 | <1% |

4. FIRST AID MEASURES

4.1 Description of first aid measures

| | |
|-----------------------------|---|
| Eye | If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes. |
| Inhalation | If inhaled (during curing), remove from contaminated area. To protect rescuer, use a Type AB (Organic vapour, Inorganic and acid gas) respirator where an inhalation risk exists. Apply artificial respiration if not breathing. |
| Skin | If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor. |
| Ingestion | For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting. Ingestion is considered unlikely due to product form. Rinse mouth out with water and give plenty of water to drink. |
| First aid facilities | Eye wash facilities and safety shower should be available. |

4.2 Most important symptoms and effects, both acute and delayed

No information provided.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

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5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May ignite in contact with incompatible materials. May evolve toxic gases (manganese oxides) when heated to decomposition. May evolve carbon oxides, nitrogen oxides, metal oxides and sulphur oxides when heated to decomposition.

5.3 Advice for firefighters

Treat as per requirements for surrounding fires. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas. May increase intensity of fire.

5.4 Hazchem code

None allocated

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store removed from incompatible substances and foodstuffs. If stored in containers, ensure they are adequately labelled, protected from physical damage and sealed when not in use.

7.3 Specific end use(s)

No information provided.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

| Substance | Reference | TWA | | STEL | |
|-------------------------------------|-----------|-----|-------------------|------|-------------------|
| | | ppm | mg/m ³ | ppm | mg/m ³ |
| Carbon black | SWA (AUS) | -- | 3 | -- | -- |
| Hydrogenated terphenyls | SWA (AUS) | 0.5 | 4.9 | -- | -- |
| Manganese, dust & compounds (as Mn) | SWA (AUS) | -- | 1 | -- | -- |
| Manganese, fume (as Mn) | SWA (AUS) | -- | 1 | -- | 3 |
| Sodium hydroxide (peak limitation) | SWA (AUS) | -- | 2 | -- | -- |
| Stearates | SWA (AUS) | -- | 5 | -- | -- |
| Talc (no asbestos fibres) | SWA (AUS) | -- | 2.5 | -- | -- |
| Terphenyls | SWA (AUS) | 0.5 | 4.7 | -- | -- |

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Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering Controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

PPE

- Eye/Face** Wear safety glasses. If sanding dry product, wear dust-proof goggles.
- Hand** Wear PVC gloves.
- Body** Wear coveralls and safety boots. If spraying, with prolonged use, or if in confined areas, wear impervious coveralls.
- Respiratory** Wear a Type AB (Organic and Inorganic gases/vapours) respirator. If sanding dry product, wear a Class P1 (Particulate) respirator. If spraying, with prolonged use, or if in confined areas, wear an Air-line respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|----------------------------------|---------------|
| Appearance | BLACK LIQUID |
| Odour | SLIGHT ODOUR |
| Odour Threshold | NOT AVAILABLE |
| pH | NOT AVAILABLE |
| Melting Point | NOT AVAILABLE |
| Boiling Point | 360°C |
| Flash Point | NOT RELEVANT |
| Evaporation Rate | NOT AVAILABLE |
| Flammability | NON FLAMMABLE |
| Upper Explosion Limit | NOT RELEVANT |
| Lower Explosion Limit | NOT RELEVANT |
| Vapour Pressure | NOT AVAILABLE |
| Vapour Density | NOT AVAILABLE |
| Solubility (water) | NOT AVAILABLE |
| Partition Coefficient | NOT AVAILABLE |
| Autoignition Temperature | NOT AVAILABLE |
| Decomposition Temperature | NOT AVAILABLE |
| Viscosity | NOT AVAILABLE |
| Explosive Properties | NOT AVAILABLE |
| Oxidising Properties | NOT AVAILABLE |
| Specific Gravity | 1.88 |

9.2 Other information

No information provided.

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10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid) and combustible materials. Incompatible with alkalis (e.g. sodium hydroxide).

10.6 Hazardous decomposition products

May evolve toxic gases (manganese oxides) when heated to decomposition. May evolve carbon oxides, nitrogen oxides, metal oxides and sulphur oxides when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

| | |
|------------------------------|---|
| Health hazard summary | Harmful - irritant. This product has the potential to cause adverse health effects with over exposure. Use safe work practices to avoid eye or skin contact and inhalation. Chronic over exposure to manganese at high levels may result in manganese poisoning (manganism), a progressively disabling brain disease, which in its latter stages resembles Parkinsons disease. Symptoms may include lack of appetite, fatigue and changes in speech, balance and personality. May cause sensitisation by skin contact. Carbon black is classified as possibly carcinogenic to humans (IARC Group 2B). |
| Eye | Severe irritant. Contact may result in irritation, lacrimation, pain, redness and blurring or dimness of vision. Prolonged contact may result in corneal burns and possible permanent damage. |
| Inhalation | Irritant. Over exposure to dust or vapours may result in irritation of the nose and throat, with coughing. Dusts enter the respiratory tract and become deposited in the major body organs. Chronic exposure may result in manganese poisoning, a disabling, usually progressive disorder of the central nervous system with symptoms resembling Parkinsonism. |
| Skin | Irritant. Contact may result in drying and defatting of the skin, rash and dermatitis. May cause sensitisation by skin contact. |
| Ingestion | May be harmful. Ingestion is considered unlikely due to product form. However, ingestion via hand-mouth transfer may result in gastrointestinal irritation, nausea and vomiting. Maintain good personal hygiene standards. Poisoning is considered unlikely by oral administration as manganese salts are poorly absorbed from the gut. Chronic exposure by ingestion may result in manganese poisoning (manganism), a progressively disabling brain disease, which in its latter stages resembles Parkinsons disease. |
| Toxicity data | <p>MANGANESE DIOXIDE (1313-13-9)</p> <p>LD50 (Ingestion): > 3478 mg/kg (rat)</p> <p>LD50 (Subcutaneous): 422 mg/kg (mouse)</p> <p>LDLo (Intratracheal): 50 mg/kg (rat)</p> <p>LDLo (Intravenous): 45 mg/kg (rabbit)</p> <p>TCLo (Inhalation): 49 mg/m³/7 hours (1-18 day pregnant mouse)</p> <p>DIPHENYLGUANIDINE (102-06-7)</p> <p>LD50 (Ingestion): 375 mg/kg (rat)</p> <p>LDLo (Intravenous): 25 mg/kg (dog)</p> <p>LDLo (Subcutaneous): 200 mg/kg (guinea pig)</p> <p>SODIUM HYDROXIDE (1310-73-2)</p> <p>LD50 (Intraperitoneal): 40 mg/kg (mouse)</p> <p>LDLo (Ingestion): 500 mg/kg (rabbit)</p> <p>HYDROGENATED TERPHENYLS (61788-32-7)</p> <p>LD50 (Ingestion): 12.5 g/kg (mouse)</p> <p>TALC (14807-96-6)</p> <p>TCLo (Inhalation): 18 mg/m³/6 hour/2 year-intermittent (rat)</p> <p>TERPHENYL (26140-60-3)</p> |

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LD50 (Ingestion): 13200 mg/kg (mouse)
 LDLo (Ingestion): > 500 mg/kg (rat)
 POLYETHYLENE GLYCOL MONO(OCTYLPHENYL) ETHER (9036-19-5)
 LD50 (Ingestion): 2800 mg/kg (rat)
 LD50 (Intraperitoneal): 770 mg/kg (rat)
 LD50 (Intravenous): 70 mg/kg (mouse)
 SODIUM STEARATE (822-16-2)
 TDLo (Ingestion): 10 mg/kg (dog-inv)

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Results of PBT and vPvB assessment

No information provided.

12.6 Other adverse effects

Manganese may exist in the environment as the more soluble (2+) form and/or the less soluble (3+) form. In acidic waters, high levels of dissolved manganese may occur. Occurs naturally (0.085% of earth's crust).

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal Mix components together (small amounts), absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Ensure protective equipment is worn when mixing. Do not seal containers/tins until reaction is complete. Contact the manufacturer/supplier for additional information (if required). Prevent contamination of drains and waterways as environmental damage may result.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

| | Land Transport (ADG) | Sea Transport (IMDG/IMO) | Air Transport (IATA/ICAO) |
|--|-------------------------|-----------------------------|------------------------------|
| 14.1 UN number | None Allocated | None Allocated | None Allocated |
| 14.2 UN proper shipping name | None Allocated | None Allocated | None Allocated |
| 14.3 Transport hazard classes | | | |
| DG Class | None Allocated | None Allocated | None Allocated |
| Subsidiary risk(s) | None Allocated | None Allocated | None Allocated |
| 14.4 Packing group | None Allocated | None Allocated | None Allocated |
| 14.5 Environmental hazards | | None Allocated | |
| 14.6 Special precautions for user | | | |
| Hazchem Code | None Allocated | | |

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poison schedule Classified as a Schedule 5 Poison using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications

| | | |
|-----------------------------|---|---|
| Product name | PR 1440 B 2 PART A | |
| | N - Dangerous for the environment Xi - Irritant Xn - Harmful | |
| Risk phrases | R20/22: | Harmful by inhalation and if swallowed. |
| | R36/38: | Irritating to eyes and skin. |
| | R43: | May cause sensitisation by skin contact. |
| | R51/53: | Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment. |
| Safety phrases | S9: | Keep container in a well ventilated place. |
| | S13/14/15/16: | Keep away from food, drink and animal feeding stuffs, halogens, mineral acids, oxidizing agents, heat and sources of ignition - No smoking. |
| | S26: | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice |
| | S35: | This material and its container must be disposed of in a safe way. |
| | S40: | To clean the floor and all objects contaminated by this material use [appropriate material to be specified by the manufacturer]. |
| | S46: | If swallowed, contact a doctor or Poisons Information Centre immediately and show container or label. |
| | S51: | Use only in well ventilated areas. |
| | S53: | Avoid exposure - obtain special instructions before use. |
| | S57: | Use appropriate container to avoid environmental contamination. |
| | S61: | Avoid release to the environment. Refer to special instructions/safety data sheets. |
| Inventory listing(s) | AUSTRALIA: AICS (Australian Inventory of Chemical Substances) All components are listed on AICS, or are exempt. | |

15.2 Chemical safety assessment

No information provided.

16. OTHER INFORMATION

Additional information This product is used in conjunction with PR 1440 B 2 PART B. Please refer to the appropriate SDS before use.

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

HEALTH EFFECTS FROM EXPOSURE:
It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

COLOUR RATING SYSTEM: RMT has assigned all ChemAlert reports a colour rating of Green, Amber or Red for the sole purpose of providing users with a quick and easy means of determining the hazardous nature of a product. Safe handling recommendations are provided in all ChemAlert reports so as to clearly identify how users can control the hazards and thereby reduce the risk (or likelihood) of adverse effects. As a general guideline, a Green colour rating indicates a low hazard, an Amber colour rating indicates a moderate hazard and a Red colour rating indicates a high hazard.

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While all due care has been taken by RMT in the preparation of the Colour Rating System, it is intended as a guide only and RMT does not provide any warranty in relation to the accuracy of the Colour Rating System. As far as is lawfully possible, RMT accepts no liability or responsibility whatsoever for the actions or omissions of any person in reliance on the Colour Rating System.

| | | |
|----------------------|-------------------|---|
| Abbreviations | ACGIH | American Conference of Governmental Industrial Hygienists |
| | CAS # | Chemical Abstract Service number - used to uniquely identify chemical compounds |
| | CNS | Central Nervous System |
| | EC No. | EC No - European Community Number |
| | EMS | Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods) |
| | GHS | Globally Harmonized System |
| | GTEPG | Group Text Emergency Procedure Guide |
| | IARC | International Agency for Research on Cancer |
| | LC50 | Lethal Concentration, 50% / Median Lethal Concentration |
| | LD50 | Lethal Dose, 50% / Median Lethal Dose |
| | mg/m ³ | Milligrams per Cubic Metre |
| | OEL | Occupational Exposure Limit |
| | PEL | Permissible Exposure Limit |
| | pH | relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). |
| | ppm | Parts Per Million |
| | REACH | Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals |
| | STEL | Short-Term Exposure Limit |
| | STOT-RE | Specific target organ toxicity (repeated exposure) |
| | STOT-SE | Specific target organ toxicity (single exposure) |
| | SUSMP | Standard for the Uniform Scheduling of Medicines and Poisons |
| | SWA | Safe Work Australia |
| | TLV | Threshold Limit Value |
| | TWA | Time Weighted Average |

Report Status This ChemAlert report has been independently compiled by RMT's scientific department utilising the original Safety Data Sheet ('SDS') for the product provided to RMT by the manufacturer. The information is based on the latest chemical and toxicological research and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. It is an independent collation by RMT of information obtained from the original SDS for this product. Its content has not been authorised or verified by the manufacturer / distributor of the chemical to which it relates.

This ChemAlert report does not constitute the manufacturer's original SDS and is not intended to be a replacement for same. It is provided to subscribers of ChemAlert as a reference tool only, is not all-inclusive and does not represent any guarantee as to the properties of the product. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this ChemAlert report, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this ChemAlert report.

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Product name

PR 1440 B 2 PART A

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End of Report