1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier
Product name: PR 1440 A 2 PART B
Synonym(s): NSN: 8030-00-723-5343 • NSN: 8030-00-753-4598 • NSN: XXXX-00-753-5009 • PR-1440 A-2, PART B (ALT FOR C160) • PRODUCT CODE: BMS 5-125 TYPE II
PPG INDUSTRIES PR 1440 A 2 PART B • PR 1440 A 2 PART B - PRODUCT CODE • PR-1440 A-2 PART B • TWO PART PACK POLYSULFIDE ADHESIVE

1.2 Uses and uses advised against
Use(s): INDUSTRIAL APPLICATIONS • 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): Flammable Liquids: Category 2
Skin Corrosion/Irritation: Category 2
Skin Sensitisation: Category 1
Serious Eye Damage / Eye Irritation: Category 2A
Toxic to Reproduction: Category 2

2.2 Label elements
Signal word: DANGER
Pictograms:

Hazard statement(s)
H225: Highly flammable liquid and vapour.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H361: Suspected of damaging fertility or the unborn child.

Prevention statement(s)
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting equipment.
P243: Take precautionary measures against static discharge.
Product name: PR 1440 A 2 PART B

Avoid breathing dust/fume/gas/mist/vapours/spray. 
Wash thoroughly after handling. 
Contaminated work clothing should not be allowed out of the workplace. 
Wear protective gloves/protective clothing/eye protection/face protection.

Response statement(s)
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. 
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 
P308 + P313 IF exposed or concerned: Get medical advice/attention. 
P321 Specific treatment is advised - see first aid instructions. 
P362 Take off contaminated clothing and wash before re-use. 
P370 + P378 In case of fire: Use appropriate media for extinction. 

Storage statement(s)
P403 + P235 Store in a well-ventilated place. Keep cool. 
P405 Store locked up. 

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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS number</th>
<th>EC number</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ETHYL KETONE (MEK)</td>
<td>78-93-3</td>
<td>201-159-0</td>
<td>10 - &lt;30%</td>
</tr>
<tr>
<td>TOLUENE</td>
<td>108-88-3</td>
<td>203-625-9</td>
<td>1 - &lt;10%</td>
</tr>
<tr>
<td>NON HAZARDOUS INGREDIENTS</td>
<td>Not Available</td>
<td>Not Available</td>
<td>remainder</td>
</tr>
<tr>
<td>POLYSULPHIDE POLYMER</td>
<td>Not Available</td>
<td>Not Available</td>
<td>2 - &lt;20%</td>
</tr>
</tbody>
</table>

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, remove from contaminated area. 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.

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.
5. FIREFIGHTING MEASURES

5.1 Extinguishing media
Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

5.2 Special hazards arising from the substance or mixture
Highly flammable. May evolve toxic gases (carbon/sulphur oxides, sulphides, hydrocarbons) when heated to decomposition. Vapour may form explosive mixtures with air. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, pilot lights, heaters, naked lights, etc when handling. Earth containers when dispensing fluids. May evolve metal oxides, nitrogen oxides and halogenated compounds when heated to decomposition.

5.3 Advice for firefighters
Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. 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.

5.4 Hazchem code
● 3YE

● Alcohol Resistant Foam is the preferred firefighting medium. Else use;
3 Normal Foam (protein based foam that is not alcohol resistant).
Y Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Contain spill and run-off.
E Evacuation of people in and around the immediate vicinity of the incident should be considered.

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. Eliminate all sources of ignition. Use spark proof and explosion proof equipment and tools.

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 in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Store below 35°C.

7.3 Specific end use(s)
No information provided.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters
Exposure standards
**Product name**

PR 1440 A 2 PART B

<table>
<thead>
<tr>
<th>Substance</th>
<th>Reference</th>
<th>TWA ppm</th>
<th>TWA mg/m³</th>
<th>STEL ppm</th>
<th>STEL mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl ethyl ketone (MEK)</td>
<td>SWA (AUS)</td>
<td>150</td>
<td>445</td>
<td>300</td>
<td>890</td>
</tr>
<tr>
<td>Toluene</td>
<td>SWA (AUS)</td>
<td>50</td>
<td>191</td>
<td>150</td>
<td>574</td>
</tr>
</tbody>
</table>

**Biological limits**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Reference</th>
<th>Determinant</th>
<th>Sampling time</th>
<th>BEI</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ETHYL KETONE (MEK)</td>
<td>ACGIH BEI</td>
<td>MEK in urine</td>
<td>End of shift</td>
<td>2 mg/L</td>
</tr>
<tr>
<td>TOLUENE</td>
<td>ACGIH BEI</td>
<td>o-Cresol in urine</td>
<td>End of shift</td>
<td>0.02 mg/L</td>
</tr>
<tr>
<td></td>
<td>ACGIH BEI</td>
<td>Toluene in urine</td>
<td>End of shift</td>
<td>0.03 mg/L</td>
</tr>
<tr>
<td></td>
<td>ACGIH BEI</td>
<td>Toluene in blood</td>
<td>Prior to last shift of workweek</td>
<td>0.02 mg/L</td>
</tr>
</tbody>
</table>

**8.2 Exposure controls**

**Engineering Controls**

Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended. Flammable/explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back. Maintain vapour levels below the recommended exposure standard.

**PPE**

- **Eye/Face**
  - Wear splash-proof goggles.

- **Hand**
  - Wear butyl or barrier gloves.

- **Body**
  - Wear anti static coveralls and boots. If spraying, with prolonged use, or if in confined areas, wear impervious, anti static 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**: BEIGE LIQUID
- **Odour**: SLIGHT ODOUR
- **Odour Threshold**: NOT AVAILABLE
- **pH**: NOT AVAILABLE
- **Melting Point**: NOT AVAILABLE
- **Boiling Point**: 79.44°C to 176.67°C
- **Flash Point**: 16.67°C (cc)
- **Evaporation Rate**: NOT AVAILABLE
- **Flammability**: HIGHLY FLAMMABLE
- **Upper Explosion Limit**: NOT AVAILABLE
- **Lower Explosion Limit**: 1.3 %
- **Vapour Pressure**: NOT AVAILABLE
- **Vapour Density**: NOT AVAILABLE
- **Solubility (water)**: INSOLUBLE
- **Partition Coefficient**: NOT AVAILABLE
- **Autoignition Temperature**: NOT AVAILABLE
- **Decomposition Temperature**: NOT AVAILABLE
- **Viscosity**: NOT AVAILABLE
- **Explosive Properties**: NOT AVAILABLE
CHEMALERT REPORT

Product name PR 1440 A 2 PART B

Oxidising Properties NOT AVAILABLE
Specific Gravity 1.41

9.2 Other information
No information provided.

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
Hazardous 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), alkalis (e.g. sodium hydroxide), heat and ignition sources.

10.6 Hazardous decomposition products
May evolve toxic gases (carbon/sulphur oxides, sulphides, hydrocarbons) when heated to decomposition. May evolve metal oxides, nitrogen oxides and halogenated compounds 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. Over exposure may result in anaemia, liver, kidney, nerve damage and sensitisation. May increase the risk of peripheral nerve damage when used with certain other solvents (e.g. n-hexane). Possible risk of harm to the unborn child.

Eye
Irritant. Contact may result in irritation, lacrimation, pain and redness. May result in burns with prolonged contact.

Inhalation
Irritant. Over exposure may result in irritation of the nose and throat, coughing, loss of appetite, nausea and vomiting. High level exposure may result in breathing difficulties, dizziness, drowsiness, pulmonary oedema and unconsciousness.

Skin
Irritant. Contact may result in drying and defatting of the skin, rash and dermatitis. May be absorbed through skin with harmful effects. May cause sensitisation by skin contact.

Ingestion
Harmful. Ingestion may result in nausea, vomiting, abdominal pain, dizziness, fatigue and diarrhoea. Ingestion of large quantities may result in liver and kidney damage, and unconsciousness. Aspiration or inhalation may cause chemical pneumonitis and pulmonary oedema.

Toxicity data
METHYL ETHYL KETONE (MEK) (78-93-3)
LC50 (Inhalation): 23500 mg/kg (rat)
LD50 (Ingestion): 2737 mg/kg (rat)
LD50 (Intraperitoneal): 607 mg/kg (rat)
LD50 (Skin): 6480 mg/kg (rabbit)
TCLo (Inhalation): 100 ppm/5 minutes (Human - eye irritant)

TOLUENE (108-88-3)
LC50 (Inhalation): 400 ppm/24 hours (mouse)
LCLo (Inhalation): 1600 ppm (guinea pig)
LD50 (Ingestion): 636 mg/kg (rat)
LD50 (Skin): 14100 µL/kg (rabbit)
LDLo (Ingestion): 50 mg/kg (human)
**PR 1440 A 2 PART B**

**12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**
No information provided.

**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**
No information provided.

**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**

**CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE**

<table>
<thead>
<tr>
<th>Land Transport (ADG)</th>
<th>Sea Transport (IMDG/IMO)</th>
<th>Air Transport (IATA/ICAO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1133</td>
<td>1133</td>
<td>1133</td>
</tr>
</tbody>
</table>

**14.1 UN number**
1133

**14.2 UN proper shipping name**
ADHESIVES containing flammable liquid

**14.3 Transport hazard classes**

<table>
<thead>
<tr>
<th>DG Class</th>
<th>Subsidiary risk(s)</th>
<th>None Allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>None Allocated</td>
<td></td>
</tr>
</tbody>
</table>

**14.4 Packing group**

<table>
<thead>
<tr>
<th>DG Class</th>
<th>Subsidiary risk(s)</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>None Allocated</td>
<td></td>
</tr>
</tbody>
</table>

**14.5 Environmental hazards**

<table>
<thead>
<tr>
<th>Hazchem Code</th>
<th>EMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3YE</td>
<td>F-E, S-D</td>
</tr>
</tbody>
</table>

**15. REGULATORY INFORMATION**

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

Poison schedule: A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
CHEMALERT REPORT

Full Report

Product name: PR 1440 A 2 PART B

Classifications:
- F - Flammable
- Repr. - Reproductive toxin
- Xi - Irritant

Risk phrases:
- R11: Highly flammable.
- R36/38: Irritating to eyes and skin.
- R43: May cause sensitisation by skin contact.
- R63: Possible risk of harm to the unborn child.

Safety phrases:
- S24/25: Avoid contact with skin and eyes.
- S36/37: Wear suitable protective clothing and gloves.

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:
- 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.

- SYNERGISM - ANTAGONISM: Ingredients in this product may act together to aggravate or reduce adverse effects. Accordingly the time weighted average concentration (TWA) provided for single ingredients should be considered as a guide only and all due care exercised when handling.

- WELDING - SANDING - CUTTING DRIED OR CURED PRODUCT: If sanding, cutting or welding dried or cured product, adverse health effects may be avoided by the use of appropriate engineering controls and/or personal protective equipment. If welding, wear a Class P2 (Metal fume) respirator and depending on the nature of the surface being welded, additional protection (e.g. for organic vapours/acid gas) may also be required. A Class P1 (Particulate) respirator is recommended if dust is generated.

- WORK PRACTICES - SOLVENTS: Organic solvents may present both a health and flammability hazard. It is recommended that engineering controls should be adopted to reduce exposure where practicable (for example, if using indoors, ensure explosion proof extraction ventilation is available). Flammable or combustible liquids with explosive limits have the potential for ignition from static discharge. Refer to AS 1020 (The control of undesirable static electricity) and AS 1940 (The storage and handling of flammable and combustible liquids) for control procedures.

- 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.
CHEMALERT REPORT

Full Report

Product name

PR 1440 A 2 PART B

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/m³  Milligrams per Cubic Metre
OEL    Occupational Exposure Limit
pH     relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm    Parts Per Million
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.

Prepared By

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Date Printed: 06 Oct 2016
Based on SDS dated: 11 Mar 2016

End of Report