1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier
Product name: PR 1764 B 2 PART B
Synonym(s):

CM6101 MRH90 • NSN: 8030-14-517-5537 • NSN: XXXX-01-423-9241 • NSN: XXXX-01-423-9241 (PART C) • NSN: XXXX-14-517-5537 • PR-1764 B-2, PART B (C471B)
PART B AIRCRAFT SEALANT • PPG INDUSTRIES PR 1764 B 2 PART B • PR 1764 B 2 PART B - PRODUCT CODE • PR1764 B2 PART B • PR1764 B2, PART B (FORMERLY)

1.2 Uses and uses advised against
Use(s):
AIRCRAFT 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 3
Skin Corrosion/Irritation: Category 2
Skin Sensitisation: Category 1
Serious Eye Damage / Eye Irritation: Category 2A
Specific Target Organ Systemic Toxicity (Single Exposure): Category 3
Carcinogenicity: Category 2
Specific Target Organ Systemic Toxicity (Repeated Exposure): Category 1

2.2 Label elements
Signal word: DANGER
Pictograms:

Hazard statement(s):
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H372 Causes damage to organs through prolonged or repeated exposure.

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.
Product name: PR 1764 B 2 PART B

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.
P260 Do not breathe 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.
P280 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.
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.
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)
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>NICKEL</td>
<td>7440-02-0</td>
<td>231-111-4</td>
<td>30 - 60%</td>
</tr>
<tr>
<td>GRAPHITE</td>
<td>7782-42-5</td>
<td>231-955-3</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>2,2’-THIODIETHANETHIOL</td>
<td>3570-55-6</td>
<td>222-671-0</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>THIRAM</td>
<td>137-26-8</td>
<td>205-286-2</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>NON HAZARDOUS INGREDIENTS</td>
<td>Not Available</td>
<td>Not Available</td>
<td>remainder</td>
</tr>
<tr>
<td>POLYTHIOETHER</td>
<td>Not Available</td>
<td>Not Available</td>
<td>10 - &lt;30%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES
Product name: PR 1764 B 2 PART B

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. To protect rescuer, use an Air-line respirator or Self Contained Breathing Apparatus (SCBA). Be aware of possible explosive atmospheres. Apply artificial respiration if not breathing. Give oxygen if available.

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
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 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

- Alcohol Resistant Foam is the preferred firefighting medium. Else use;
- Normal Foam (protein based foam that is not alcohol resistant).
- Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Contain spill and run-off.

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.

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 above 5°C.

7.3 Specific end use(s)
No information provided.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters
Exposure standards

<table>
<thead>
<tr>
<th>Substance</th>
<th>Reference</th>
<th>TWA</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ppm</td>
<td>mg/m³</td>
</tr>
<tr>
<td>Graphite (all forms except fibres)</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>3</td>
</tr>
<tr>
<td>Nickel, metal</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Nickel, soluble compounds (as Ni)</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>0.1</td>
</tr>
<tr>
<td>Thiram</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Toluene</td>
<td>SWA (AUS)</td>
<td>50</td>
<td>191</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>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 PVA or viton (R) gloves.

Body
Wear coveralls. 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
GREY PASTE / SOLID

Odour
SLIGHT ODOUR

Odour Threshold
NOT AVAILABLE
Product name: PR 1764 B 2 PART B

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>FLAMMABLE</td>
</tr>
<tr>
<td>Flash Point</td>
<td>32.22°C (cc)</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Melting Point</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>pH</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.11</td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>INSOLUBLE</td>
</tr>
<tr>
<td>Vapour Density</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Upper Explosion Limit</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Lower Explosion Limit</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Viscosity</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Oxidising Properties</td>
<td>NOT AVAILABLE</td>
</tr>
</tbody>
</table>

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
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 when heated to decomposition.
11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Health Hazard Summary

No information provided.

No information provided.

No information provided.

No information provided.

No information provided.

NICKEL (7440-02-0)
LD50 (Ingestion): > 9000 mg/kg (Sprague-Dawley rat)
LD50 (Intraperitoneal): 250 mg/kg (rat)
LDLo (Ingestion): 5 mg/kg (guinea pig)
LDLo (Subcutaneous): 7.5 mg/kg (rabbit)
TCLo (Inhalation): 15 mg/m³/91W-I (guinea pig - tumors)
TDLo (Ingestion): 158 mg/kg (rat - foetotoxic)

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)

THIRAM (137-26-8)
LC50 (Inhalation): 500 mg/m³/4 hours (rat)
LD50 (Ingestion): 210 mg/kg (rabbit); > 1800 mg/kg (rat)
LD50 (Intraperitoneal): 70 mg/kg (mouse)
LD50 (Skin): > 2000 mg/kg (rat)
LD50 (Subcutaneous): 646 mg/kg (rat)
LDLo (Ingestion): 230 mg/kg (cat)
LDLo (Skin): 1000 mg/kg (rabbit)
TCLo (Inhalation): 0.03 mg/m³/5 years intermittently (human)
TDLo (Ingestion): 108 mg/kg/1 year (rat)

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Toxic to aquatic life with long lasting effects.

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>Packing group</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>None Allocated</td>
<td>III</td>
</tr>
</tbody>
</table>

14.4 Packing group

14.5 Environmental hazards
Not a Marine Pollutant

14.6 Special precautions for user

<table>
<thead>
<tr>
<th>Hazchem Code</th>
<th>EMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>●3Y</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).

**Classifications**
Carc. - Carcinogen
F - Flammable
T - Toxic
Xi - Irritant

**Risk phrases**
R10: Flammable.
R36/37/38: Irritating to eyes, respiratory system and skin.
R40: Limited evidence of a carcinogenic effect.
R43: May cause sensitisation by skin contact.
R48/23: Toxic: danger of serious damage to health by prolonged exposure through inhalation.

**Safety phrases**
S36/37: Wear suitable protective clothing and gloves.
S45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).

**WHS regulatory information**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS number</th>
<th>Regulation</th>
<th>Details</th>
</tr>
</thead>
</table>
Product name: PR 1764 B 2 PART B

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS number</th>
<th>Regulation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>NICKEL</td>
<td>7440-02-0</td>
<td>Restricted Hazardous Chemicals</td>
<td>Nickel &amp; its compounds. For abrasive blasting &gt;0.1%.</td>
</tr>
</tbody>
</table>

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
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.

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
PR 1764 B 2 PART B

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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Date Printed: 08 Nov 2016
Based on SDS dated: 24 Apr 2016

End of Report