1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier
Product name: PS 870 B 2 PART A
Synonym(s): BMS 5-95 CLB2 • NSN 8030-00-518-3439
PPG PS 870 B 2 PART A • PS 870 B 2 PART A - PRODUCT CODE

1.2 Uses and uses advised against
Use(s): COATING • COATING PAINT • INDUSTRIAL APPLICATIONS • PAINT

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 Sensitisation: Category 1
- Serious Eye Damage / Eye Irritation: Category 2A
- Acute Toxicity: Inhalation: Category 4
- Specific Target Organ Systemic Toxicity (Single Exposure): Category 3
- Germ Cell Mutagenicity: Category 1B
- Carcinogenicity: Category 1B
- Specific Target Organ Systemic Toxicity (Repeated Exposure): Category 2
- Aquatic Toxicity (Chronic): Category 1

2.2 Label elements
Signal word: DANGER
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.
- H335: May cause respiratory irritation.
- H340: May cause genetic defects.
- H350: May cause cancer.
- H373: May cause damage to organs through prolonged or repeated exposure.
**Product name**  
**PS 870 B 2 PART A**

**H410**  
Very toxic to aquatic life with long lasting effects.

**Prevention statement(s)**
- P202: Do not handle until all safety precautions have been read and understood.
- 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.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Response statement(s)**
- 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.
- P308 + P313: IF exposed or concerned: Get medical advice/attention.
- P321: Specific treatment is advised - see first aid instructions.
- P330: Rinse mouth.
- P362: Take off contaminated clothing and wash before re-use.
- P391: Collect spillage.

**Storage statement(s)**
- P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
- 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>MANGANESE DIOXIDE</td>
<td>1313-13-9</td>
<td>215-202-6</td>
<td>30 - 60%</td>
</tr>
<tr>
<td>MAGNESIUM CHROMATE</td>
<td>13423-61-5</td>
<td>236-540-0</td>
<td>10 - 30%</td>
</tr>
<tr>
<td>DIPHENYLGUANIDINE</td>
<td>102-06-7</td>
<td>203-002-1</td>
<td>1 - 10%</td>
</tr>
<tr>
<td>ZEOLITE</td>
<td>1318-02-1</td>
<td>215-283-8</td>
<td>1 - 10%</td>
</tr>
<tr>
<td>SODIUM HYDROXIDE</td>
<td>1310-73-2</td>
<td>215-185-5</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>SODIUM STEARATE</td>
<td>822-16-2</td>
<td>212-490-5</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>HYDROGENATED TERPHENYLS</td>
<td>61788-32-7</td>
<td>262-967-7</td>
<td>10 - 30%</td>
</tr>
<tr>
<td>DIPENTAMETHYLENETHIURAM TETRASULPHIDE</td>
<td>120-54-7</td>
<td>204-406-0</td>
<td>1 - 10%</td>
</tr>
<tr>
<td>TERPHENYL</td>
<td>26140-60-3</td>
<td>247-477-3</td>
<td>1 - 10%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES
Product name: PS 870 B 2 PART A

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). 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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 evolve toxic gases (carbon/chromium oxides, hydrocarbons) when heated to decomposition. May evolve nitrogen oxides, sulphur oxides and 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

● 3Z

- Alcohol Resistant Foam is the preferred firefighting medium. Else use;
- Normal Foam (protein based foam that is not alcohol resistant).
- Z 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 and foodstuffs. Contamination with incompatibles may cause fire or explosion. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use. Store removed from direct sunlight.

7.3 Specific end use(s)
No information provided.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

<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>Chromium (VI) compounds (as Cr), water soluble</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>0.05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Hydrogenated terphenyls</td>
<td>SWA (AUS)</td>
<td>0.5</td>
<td>4.9</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Manganese, dust &amp; compounds (as Mn)</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Manganese, fume (as Mn)</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>1</td>
<td>--</td>
<td>3</td>
</tr>
<tr>
<td>Sodium hydroxide (peak limitation)</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>2</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Stearates</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>5</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Terphenyls</td>
<td>SWA (AUS)</td>
<td>0.5</td>
<td>4.7</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

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 splash-proof goggles.
- **Hand**: Wear butyl or 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**: BLACK LIQUID
- **Odour**: SLIGHT ODOUR
- **Odour Threshold**: NOT AVAILABLE
- **pH**: NOT AVAILABLE
- **Melting Point**: NOT AVAILABLE
- **Boiling Point**: 340°C
<table>
<thead>
<tr>
<th>Product name</th>
<th>PS 870 B 2 PART A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>NOT RELEVANT</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Flammability</td>
<td>NON FLAMMABLE</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>Vapour Pressure</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Vapour Density</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>INSOLUBLE</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Autoignition Temperature</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>
<tr>
<td>Specific Gravity</td>
<td>1.8</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 combustible materials, reducing agents (e.g. sulphites), metals and some plastics and resins. Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid) and alkalis (e.g. sodium hydroxide).

10.6 Hazardous decomposition products
May evolve toxic gases (carbon/chromium oxides, hydrocarbons) when heated to decomposition. May evolve nitrogen oxides, sulphur oxides and metal oxides when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Health hazard summary
Toxic - 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. Hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1). May cause sensitisation by skin contact. May cause genetic defects.

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

**PS 870 B 2 PART A**

**Inhalation**

Harmful - irritant. Over exposure may result in irritation of the nose and throat, coughing, nausea and headache. High level exposure may result in dizziness, drowsiness, breathing difficulties and unconsciousness. Hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1).

**Skin**

Irritant. Contact may result in irritation, redness, rash and dermatitis. May be absorbed through skin with harmful effects. May cause sensitisation by skin contact.

**Ingestion**

Harmful. Ingestion may result in gastrointestinal irritation, nausea, vomiting, abdominal pain, diarrhoea, headache, dizziness and drowsiness with large quantities.

**Toxicity data**

MANGANESE DIOXIDE (1313-13-9)
- **LD50 (Ingestion):** > 3478 mg/kg (rat)
- **LD50 (Subcutaneous):** 422 mg/kg (mouse)
- **LDLo (Intratracheal):** 50 mg/kg (rat)
- **LDLo (Intravenous):** 45 mg/kg (rabbit)
- **TCLo (Inhalation):** 49 mg/m³/7 hours (1-18 day pregnant mouse)

DIPHENYLGUANIDINE (102-06-7)
- **LD50 (Ingestion):** 375 mg/kg (rat)
- **LDLo (Intravenous):** 25 mg/kg (dog)
- **LDLo (Subcutaneous):** 200 mg/kg (guinea pig)

SODIUM HYDROXIDE (1310-73-2)
- **LD50 (Intraperitoneal):** 40 mg/kg (mouse)
- **LDLo (Ingestion):** 500 mg/kg (rabbit)

SODIUM STEARATE (822-16-2)
- **TDLo (Ingestion):** 10 mg/kg (dog-inv)

HYDROGENATED TERPHENYLS (61788-32-7)
- **LD50 (Ingestion):** 12.5 g/kg (mouse)

TERPHENYL (26140-60-3)
- **LD50 (Ingestion):** > 500 mg/kg (rat)

**12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

Very 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**

WATER: Chromium (VI) may be reduced to Chromium (III) by organic matter present in water, and may eventually deposit in sediments. Toxic to microorganisms. May bioaccumulate. SOIL: Chromium in the soil may be transported from soil through runoff and leaching of water. ATMOSPHERE: Chromium is primarily removed from the atmosphere by fallout and precipitation and may enter surface water or soil.
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>3082</td>
<td>3082</td>
<td>3082</td>
</tr>
</tbody>
</table>

**14.1 UN number**
3082

**14.2 UN proper shipping name**
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**14.3 Transport hazard classes**
- **DG Class**: 9
- **Subsidiary risk(s)**: None Allocated
- **Packing group**: III
- **Environmental hazards**: Marine Pollutant

**14.4 Packing group**
- **Land Transport**: III
- **Sea Transport**: III
- **Air Transport**: III

**14.5 Special precautions for user**
- **Hazchem Code**: •3Z
- **EMS**: F-A, S-F

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**
- **Carc.** - Carcinogen
- **Muta.** - Mutagen
- **N** - Dangerous for the environment
- **Xi** - Irritant
- **Xn** - Harmful

**Risk phrases**
- **R20/22**: Harmful by inhalation and if swallowed.
- **R36/37/38**: Irritating to eyes, respiratory system and skin.
- **R43**: May cause sensitisation by skin contact.
- **R46**: May cause heritable genetic damage.
- **R48/20**: Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- **R49**: May cause cancer by inhalation.
- **R50/53**: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases**
- **S16**: Keep away from sources of ignition - No smoking.
- **S24**: Avoid contact with skin.
Product name: PS 870 B 2 PART A

S37: Wear suitable gloves.
S53: Avoid exposure - obtain special instructions before use.
S61: Avoid release to the environment. Refer to special instructions/safety data sheets.

WHS regulatory information

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS number</th>
<th>Regulation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAGNESIUM CHROMATE</td>
<td>13423-61-5</td>
<td>Restricted Hazardous Chemicals</td>
<td>Chromate. For wet abrasive blasting.</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

IARC GROUP 1 - CONFIRMED HUMAN CARCINOGEN. This product contains an ingredient for which there is sufficient evidence to have been classified by the International Agency for Research into Cancer as a human carcinogen. The use of products known to be human carcinogens should be strictly monitored and controlled.

CHROMATES - CHROMIUM PRODUCTS: Asthma sufferers, respiratory impaired or previously sensitised (respiratory or skin) individuals are advised to avoid all exposure to chromium or chromate based products.

CHROMIUM: The most common form of chromium found in nature and in biological materials is trivalent (III) chromium which is poorly absorbed into the body. Chromium (VI) is readily absorbed where it is converted intracellularly to the carcinogenic chromium (III) form. Chromium (VI) compounds are classified as carcinogenic to humans (IARC Group 1). Chromium (III) is not classifiable as to its carcinogenicity in humans (IARC Group 3).

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
Product name: PS 870 B 2 PART A

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

Risk Management Technologies
5 Ventnor Ave, West Perth
Western Australia 6005
Phone: +61 8 9322 1711
Fax: +61 8 9322 1794
Email: info@rmt.com.au
Web: www.rmt.com.au

Last Reviewed: 31 Mar 2016
Date Printed: 06 Oct 2016
Based on SDS dated: 14 Dec 2015

End of Report