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)	
P403 + P233 + P235	Store in a well-ventilated place. Keep cool. 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

Ingredient	CAS number	EC number	Content
NICKEL	7440-02-0	231-111-4	30 - 60%
GRAPHITE	7782-42-5	231-955-3	10 - <30%
TOLUENE	108-88-3	203-625-9	1 - <10%
2,2'-THIODIETHANETHIOL	3570-55-6	222-671-0	<1%
THIRAM	137-26-8	205-286-2	<1%
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	remainder
POLYTHIOETHER	Not Available	Not Available	10 - <30%

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

•3Y

- • 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.

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.

Product name **PR 1764 B 2 PART B**

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

Substance	Reference	TWA		STEL	
		ppm	mg/m³	ppm	mg/m³
Graphite (all forms except fibres)	SWA (AUS)	--	3	--	--
Nickel, metal	SWA (AUS)	--	1	--	--
Nickel, soluble compounds (as Ni)	SWA (AUS)	--	0.1	--	--
Thiram	SWA (AUS)	--	1	--	--
Toluene	SWA (AUS)	50	191	150	574

Biological limits

Ingredient	Reference	Determinant	Sampling time	BEI
TOLUENE	ACGIH BEI	o-Cresol in urine	End of shift	0.02 mg/L
	ACGIH BEI	Toluene in urine	End of shift	0.03 mg/L
	ACGIH BEI	Toluene in blood	Prior to last shift of workweek	0.02 mg/L

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.

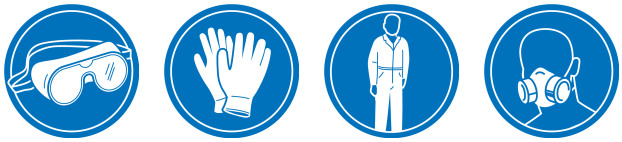
PPE

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**

Flammability	FLAMMABLE
Flash Point	32.22°C (cc)
Boiling Point	NOT AVAILABLE
Melting Point	NOT AVAILABLE
Evaporation Rate	NOT AVAILABLE
pH	NOT AVAILABLE
Specific Gravity	2.11
Solubility (water)	INSOLUBLE
Vapour Density	NOT AVAILABLE
Vapour Pressure	NOT AVAILABLE
Upper Explosion Limit	NOT AVAILABLE
Lower Explosion Limit	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

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.

Product name **PR 1764 B 2 PART B**

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.

Product name **PR 1764 B 2 PART B**

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

	Land Transport (ADG)	Sea Transport (IMDG/IMO)	Air Transport (IATA/ICAO)
14.1 UN number	1133	1133	1133
14.2 UN proper shipping name		ADHESIVES containing flammable liquid	
14.3 Transport hazard classes			
DG Class	3	3	3
Subsidiary risk(s)	None Allocated	-	-
14.4 Packing group	III	III	III
14.5 Environmental hazards		Not a Marine Pollutant	
14.6 Special precautions for user			
Hazchem Code	•3Y		
EMS		F-E, S-D	

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

Ingredient name	CAS number	Regulation	Details

Product name **PR 1764 B 2 PART B**

Ingredient name	CAS number	Regulation	Details
NICKEL	7440-02-0	Restricted Hazardous Chemicals	Nickel & its compounds. For abrasive blasting >0.1%.

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

Product name **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.

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

End of Report