

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name PR 1428 B 2 PART A
Synonym(s) BMS 5-37 CLB2 • NSN: 8030-01-383-4993 • NSN: XXXX-00-616-9191
PR 1428 B 2 PART A • PR1428 B2 PART A (FORMERLY) • PR-1428 B-2, PART A (FORMERLY)

1.2 Uses and uses advised against

Use(s) AIRCRAFT SEALANT • CURING AGENT • 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 1428 B 2 PART A
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
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.
P321	Specific treatment is advised - see first aid instructions.
P330	Rinse mouth.
P332 + P337 + P313	If skin or eye irritation occurs: Get medical advice/ attention.
P333 + P313	If skin irritation or rash occurs: 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%
SODIUM HYDROXIDE	1310-73-2	215-185-5	<10%
HYDROGENATED TERPHENYLS	61788-32-7	262-967-7	10-30%
CARBON BLACK	1333-86-4	215-609-9	<10%
DIPENTAMETHYLENETHIURAM TETRASULPHIDE	120-54-7	204-406-0	<10%
POLYETHYLENE GLYCOL MONO(OCTYLPHENYL) ETHER	9036-19-5	618-541-1	<10%
SODIUM STEARATE	822-16-2	212-490-5	<10%
TERPHENYL	26140-60-3	247-477-3	<10%
ZEOLITE	1318-02-1	215-283-8	<10%

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 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

Special mixtures of dry chemical. Prevent contamination of drains and waterways.

5.2 Special hazards arising from the substance or mixture

Combustible. May evolve toxic gases (carbon/ manganese oxides and hydrocarbons) when heated to decomposition. May evolve nitrogen oxides and sulphur 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
- 3 Foam
- Z Self Contained Breathing apparatus and protective gloves.

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 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 as a Class C1 Combustible Liquid (AS1940).

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	--	--

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Substance	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Stearates	SWA (AUS)	--	5	--	--
Terphenyls	SWA (AUS)	0.5	4.7	--	--

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. Where the boiling point is < 65°C, use an AX filter type.



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	> 37.78°C
Flash Point	93.33°C (cc)
Evaporation Rate	NOT AVAILABLE
Flammability	CLASS C1 COMBUSTIBLE
Upper Explosion Limit	NOT AVAILABLE
Lower Explosion Limit	NOT AVAILABLE
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	1.76

9.2 Other information

% Volatiles NOT AVAILABLE

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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 will not 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 (carbon/ manganese oxides and hydrocarbons) when heated to decomposition. May evolve nitrogen 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.
Eye	Irritant. Contact may result in irritation, lacrimation, pain and redness.
Inhalation	Harmful - irritant. Over exposure may result in mucous membrane irritation of the respiratory tract. 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 irritation. May cause sensitisation by skin contact.
Ingestion	Harmful. Ingestion may result in gastrointestinal irritation, possible burns to the mouth and throat, nausea, vomiting, abdominal pain and diarrhoea.
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>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>POLYETHYLENE GLYCOL MONO(OCTYLPHENYL) ETHER (9036-19-5)</p> <p>LD50 (Ingestion): 2800 mg/kg (rat)</p> <p>LD50 (Intraperitoneal): 770 mg/kg (rat)</p> <p>LD50 (Intravenous): 70 mg/kg (mouse)</p> <p>SODIUM STEARATE (822-16-2)</p> <p>TDLo (Ingestion): 10 mg/kg (dog-inv)</p> <p>TERPHENYL (26140-60-3)</p> <p>LD50 (Ingestion): 13200 mg/kg (mouse)</p> <p>LDLo (Ingestion): > 500 mg/kg (rat)</p>

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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

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	3082	3082	3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.		
14.3 Transport hazard classes			
DG Class	9	9	9
Subsidiary risk(s)	None Allocated	-	-
14.4 Packing group	III	III	III
14.5 Environmental hazards		Marine Pollutant	
14.6 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 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 N - Dangerous for the environment

Product name	PR 1428 B 2 PART A	
	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	S24:	Avoid contact with skin.
	S37:	Wear suitable gloves.
	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-1428 B 2 PART B. Please consult the appropriate ChemAlert report 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.

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

Product name

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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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End of Report