



Appleton Grp LLC
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**IMPORTANT: EMERGENCY CONTACT
INFORMATION IS ENCLOSED.**

Dear Customer,

Enclosed please find the Safety Data Sheet (SDS) for the **Appleton® RapidEX Base and Activator**.

This product is purchased from the manufacturer by Appleton and is distributed with no modification other than packaging, as applicable. Questions regarding application and use may be directed to Appleton Technical Support.

Any questions regarding the composition, safe use or potential hazards associated with this material that are not answered in the SDS should be directed to the manufacturer.

Thank you for your support of Appleton and our extensive product line.



SAFETY DATA SHEET

PC 6182 (RAPIDEX) BASE

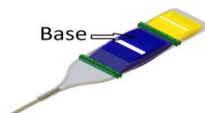
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The PC6182 (RapidEx) Activator and Base are supplied in a small sealed applicator, separated from each other but adequately contained. The applicator is sealed in a foil bag that is limited in size to the ranges outlined in section 16 below. Although the risk of harm may be high when continuously exposed to substantial volumes of the substance, the risk is considered to be relatively low due to the small package weights / volumes involved. Because of the nature of the packaging of the material, the risks associated with intentional or unintentional misuse may be deemed to be extremely low. The material is not volatile, either before opening, after opening, after mixing, or after accidental spillage.

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: PC 6182 (RapidEx) BASE
Product code: PC 6182 (RapidEx) BASE



1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: Component for polyurethane systems

1.3. Details of the supplier of the safety data sheet

Company name:	UK	AUSTRALIA	USA
	CMP Products Limited Glasshouse Street St Peters, Newcastle upon Tyne NE6 1BS United Kingdom	CMP Products Pty Limited 2-3 / 22 Harland Avenue Malaga, WA 6090 Australia	CMP Products Texas Inc 5222 N. Sam Houston Pkwy E. Houston, Texas, 77032 USA
E Mail:	cmp@cmp-products.com	perthoffice@cmp-products.com	houstonoffice@cmp-products.com
Website:	www.cmp-products.com	www.cmp-products.com	www.cmp-products.com

1.4. Emergency Telephone number:

UK:- +44(0) 1422 835 835 (office hours only)	AUSTRALIA:- +61(0) 8 9249 4508 (office hours)	USA:- +281 776 5201 (office hours only)
NORWAY:- + 47 22 59 13 00		

Section 2: Hazards Identification

2.1. Classification of the substance or mixture

HAZARDOUS ACCORDING TO NOHSC CRITERIA (Australia)

Hazard Category under NOHSC: Toxic (T), Irritant (Xi)
NOHSC Classification: HAZARDOUS SUBSTANCE, NON-DANGEROUS GOOD

CLP Classification: This product has no classification under CLP.
CHIP Classification: This product has no classification under CHIP.

Safety Phrases: Not applicable
Poison Schedule: This material is classed as an S5 poison in Australia and must be stored, handled and used according to the appropriate regulations.
Warning Statement: Avoid contact with eyes and skin

2.2. Label elements

Label elements under CLP: This product has no label elements

Label elements under
CHIP: This product has no label elements



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Hazard symbols: Symbol not required, except for USA.

Label requirements for USA

HMIS rating (scale 0-4):

Health = 1
Fire = 1
Reactivity = 0

NFPA ratings (scale 0-4):

Health = 0
Flammability = 1
Instability = 1
Special = none



Safety phrases: Not applicable

2.3. Other hazards

PBT: This substance is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

Hazardous ingredients:

2,2'-DIHYDROXYISOPROPYL ETHER

EINECS	CAS	CHIP Classification	CLP Classification	Percent
246-770-3	25265-71-8	Xi: R37	STOT SE 3: H335	10-30%

All other ingredients not hazardous according to NOHSC Criteria

Section 4: First aid measures

4.1 First Aid measures

- Skin contact:** If material is splashed onto the skin, immediately remove any contaminated clothing or footwear as applicable and wash skin thoroughly with soap and water. Flush skin with running water. Seek medical attention if after washing, irritation persists.
- Eye contact:** If material is splashed into eyes, immediately, flush with plenty of running water for 15 minutes, ensuring eyelids are held open. If irritation persists seek medical attention.
- Ingestion:** If swallowed, DO NOT induce vomiting. If person is conscious wash out mouth and give half a litre of water to drink immediately. Seek medical attention immediately.
- Inhalation:** Remove casualty from exposure and take to fresh air ensuring one's own safety whilst doing so. Apply resuscitation if victim is not breathing. If trained personnel available, administer oxygen if breathing is difficult. Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Skin contact:** There may be irritation and redness at the site of contact.
- Eye contact:** There may be irritation and redness. The eyes may water profusely.
- Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.
- Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.



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4.3. Indication of any immediate medical attention and special treatment needed

- Immediate / special treatment:** First Aid / Eye bathing equipment should be available on the premises.
- First Aid Facilities:** Eye wash fountain, safety shower and normal washroom facilities.
- Advice to Doctor:** Treat symptomatically.
In case of poisoning, contact Poisons Information Centre
In Australia Tel: 131126
In New Zealand Tel: 034747000

Section 5: Fire-fighting measures

5.1. Fire / explosion hazard

Move undamaged containers from fire area if safe to do so.

5.2. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use foam, water spray (fog), CO₂ or dry powder. Use water spray to cool fire-exposed containers and for large fires.

5.3. Hazardous Decomposition Products

Exposure hazards: Decomposes on heating emitting toxic and/or irritating fumes including carbon monoxide and carbon dioxide.

5.4. Fire Fighting Procedures

Advice for fire-fighters: Wear self-contained breathing apparatus (SCBA) in confined spaces, in oxygen deficient atmospheres or if exposed to products of decomposition. Wear full protective clothing to prevent contact with skin and eyes.

5.5 Hazchem Code None allocated. (Australia)

5.6 Flammability This product is not flammable.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Use appropriate personal protective equipment. Refer to section 8 (Exposure Controls / Personal Protection) for personal protection details. Avoid any contact. Evacuate non-emergency personnel from area. If outside, do not approach from downwind, and keep bystanders upwind of spill, and away from danger point. Mark out the contaminated area with signs, barricade area, and prevent access to unauthorised personnel. Ventilate the area as required.

6.2. Environmental precautions

Environmental precautions: Do not discharge into sewers, drains or rivers. Contain the spillage to prevent contamination of soil, surface water or ground water using bunding. Turn leaking containers leak-side up to prevent the escape of liquid.
Should the product enter sewer or drains, it should be pumped into a covered vented container, and the cover should be placed loosely on the container, but not made pressure tight. Move container to a well-ventilated area. Emergency Services may need to be called to assist in the clean-up operation.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Ventilate the area. Wear protective equipment to prevent skin and eye contact, as outlined in section 8. Material may be slippery when spilled. Walk cautiously. A suitable bund material, e.g. soil or sand should be used to contain the spillage and to prevent run off into drains and waterways. Using absorbent soil, sand, vermiculite or other inert matter collect material and seal in suitable and properly labelled containers and remove for disposal in accordance with local



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regulations. Clean up affected floor areas. Thoroughly wash contaminated areas with plenty of water.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Not to be opened until ready for use in accordance with the manufacturer's instructions. Avoid direct contact with the substance. Avoid the formation or spread of mists in the air. Do not eat, drink or smoke whilst handling the material.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well-ventilated area, between 5°C and 25°C, out of direct sunlight. Store away from sources of heat or ignition. Store away from oxidising agents. Ensure that containers remain unopened during storage. The floor of the storage room must be impermeable to prevent the escape of liquids.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: Not applicable

8.2. Exposure controls

Engineering measures: Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate unless the use of a local exhaust material is heated, reacted or otherwise changed in some type of chemical reaction, then the ventilation system is recommended. If exhaust ventilation is not available or inadequate, use approved respirator to local National Standards. The floor of the storage room must be impermeable to prevent the escape of liquids.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Avoid breathing of vapours/gases. The use of a respirator for organic vapours with disposable or with replaceable filters is recommended. Filter capacity and respirator type depends on exposure levels and type of contaminant. If entering spaces where the airborne concentration of a contaminant is unknown then the use of a self-contained breathing apparatus (SCBA) with positive pressure air supply is recommended. It is recommended that SCBA should comply with AS/NZS 1715/1716 or equivalent National Standard.

Hand protection: Wear impervious gloves to prevent skin contact.

Eye protection: Wear safety glasses with side shields, chemical goggles or face shield to protect eyes. Ensure eye bath is available.

Skin protection: Wear suitable impervious protective clothing to prevent skin contact.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid
Colour: Blue
Odour: Barely Perceptible odour
Evaporation rate: Negligible
Solubility in water: Insoluble



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Viscosity: Oily, 12 Poise @ 25°C
Boiling point/range°C: >195
Flash point°C: >185
Relative density: 0.93

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions: Hazardous polymerisations or reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat, flames, ignition sources and incompatibles.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Hazardous
Decomposition Products In combustion emits toxic fumes.

Section 11: Toxicological information

No adverse health effects are expected, if the product is handled in accordance with this Material Safety Data Sheet and the product label. Symptoms and effects that may arise if the product is mishandled and overexposure occurs are listed below.

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	>2000	mg/kg
DERMAL	RBT	LD50	>2000	mg/kg

Hazardous ingredients:

2,2'-DIHYDROXYISOPROPYL ETHER

Route	Species	Test	Value	Units
ORAL	RAT	LD50	14800	mg/kg
DERMAL	RBT	LD50	>5010	mg/kg
VAPOURS	RAT	4H LC50	2.34	mg/l

11.2 Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.



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- Eye contact:** There may be irritation and redness.
- Ingestion:** There may be irritation of the throat.
- Inhalation:** No symptoms.
- Delayed / immediate effects:** Prolonged or repeated skin contact may lead to dermatitis.
Prolonged or repeated exposure may lead to irreversible damage to health.
Prolonged or repeated exposure may lead to permanent irreversible injury.
- Chronic effects:** Prolonged or repeated contact with this substance will cause sensitisation by skin contact.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
ZEBRAFISH (Brachydanio rerio)	96H LC50	>100	mg/l
Daphnia magna	48H EC50	>100	mg/l

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Do not allow into any sewers, drains, on the ground or into any body of water. Any disposal must be accordance with applicable government regulations. Transfer to a suitable container and arrange for collection by specialist waste disposal agent.

N.B The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product is not classified for transport by Road, *Rail, Air or Sea

*According to all of the following Governing Body Regulations:

ADR/RID – Transport by Road and Rail



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IMDG – Transport by Sea

IATA – Transport by Air

CDG – Transport by Road and Rail (UK Only)

This product is not classified as dangerous in the meaning of transport regulations.

Section 15: Regulatory information

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

Poison Schedule S5 in Australia

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

15.3 Inventory Status

Australia (AICS) Y (Y = all ingredients are on the inventory)

Section 16: Other information

16.1 Level of Risk



The PC6182 Activator and Base are supplied in a small sealed applicator, separated from each other but adequately contained. The applicator is sealed in a foil bag that is limited in size to the ranges outlined in the table below. Although the risk of harm may be high when continuously exposed to substantial volumes of the substance, the risk is considered to be relatively low due to the small package weights / volumes involved. Because of the nature of the packaging of the material, the risks associated with intentional or unintentional misuse may be deemed to be extremely low.

The material is not volatile, either before opening, after opening, after mixing, or after accidental spillage.

CMP Cable Gland Size	Connection Thread Size	Maximum Resin Bag Size	Weight (g) per Bag		Total Weight (g)
			PC6182 Base	PC6182 F Activator	
20S	M20 or 1/2" NPT	1 x 30 cc	20.5	9.1	29.6
20	M20 or 1/2" NPT	1 x 30 cc	20.5	9.1	29.6
25	M25 or 3/4" NPT	1 x 30 cc	20.5	9.1	29.6
32	M32 or 1" NPT	1 x 30 cc	20.5	9.1	29.6
40	M40 or 1-1/4" NPT	1 x 30 cc	20.5	9.1	29.6
50S	M50 or 1-1/2" NPT	1 x 80 cc	56.0	24.5	80.5
50	M50 or 2" NPT	1 x 80 cc	56.0	24.5	80.5
63S	M63 or 2" NPT	2 x 80 cc	56.0	24.5	161.0
63	M63 or 2-1/2" NPT	2 x 80 cc	56.0	24.5	161.0
75S	M75 or 2-1/2" NPT	2 x 80 cc	56.0	24.5	161.0
75	M75 or 3" NPT	3 x 80 cc	56.0	24.5	241.5
90	M90 or 3-1/2" NPT	3 x 80 cc	56.0	24.5	241.5
100	M100 or 4" NPT	4 x 80 cc	56.0	24.5	322.0



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16.2 Other information

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Depending on the production parameters, any uncovered surfaces of thermoset moldings produced using this raw material may contain traces of substances (e.g. starting and reaction products, catalysts, release agents) with hazardous characteristics.

Skin contact with traces of these substances must be avoided. When demolding or otherwise handling freshly molded thermoset parts, protective textile gloves must be worn as a minimum.

Phrases used in sections 2 and 3:

R37: Irritating to respiratory system.

H335: May cause respiratory irritation.

Legal disclaimer: This MSDS summarises our best knowledge of the health and safety hazard information available on the product and the measures to be used to handle and use the product safely. Each user should read this MSDS and consider the information in connection with the way the product is intended to be handled or used. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Key Legend Information:

CHIP – Chemicals (Hazardous Information and Packaging for Supply)

CLP – Classification, Labelling and Packaging of Substances and Mixtures

EINECS – European Chemical Substance Information System

CAS – Chemicals Abstracts Service

TWA - Time Weighted Average (International)

STEL - Short Term Exposure Limit (International)

EPA - Environmental Protection Agency (International)

NIOSH - National Institute for Occupational Safety and Health [US]

NOHSC - National Occupational Health and Safety Commission [Australia]

IATA - International Aviation Transport Authority (International)

ICAO - International Civil Aviation Organization (International)

IMO - International Maritime Organisation. (International)

IMDG - International Maritime Dangerous Goods (International)

United Nations Recommendations for the Transport of Dangerous Goods and Globally Harmonized System for the classification and labelling of Chemicals. (International)

EU - European Union

USA = United States of America

AUST = Australia

Principal References:

Information supplied by manufacturer, reference sources including the public domain.



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PC 6182 F (RAPIDEX) ACTIVATOR

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The PC6182 (RapidEx) Activator and Base are supplied in a small sealed applicator, separated from each other but adequately contained. The applicator is sealed in a foil bag that is limited in size to the ranges outlined in section 16 below. Although the risk of harm may be high when continuously exposed to substantial volumes of the substance, the risk is considered to be relatively low due to the small package weights / volumes involved. Because of the nature of the packaging of the material, the risks associated with intentional or unintentional misuse may be deemed to be extremely low.

The material is not volatile, either before opening, after opening, after mixing, or after accidental spillage.

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: PC 6182 F (RapidEx) ACTIVATOR
Product code: PC 6182 F (RapidEx) ACTIVATOR



1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: Di-/polyisocyanate components for the production of polyurethanes

1.3. Details of the supplier of the safety data sheet

Company name:	UK	AUSTRALIA	USA
	CMP Products Limited Glasshouse Street St Peters, Newcastle upon Tyne NE6 1BS United Kingdom	CMP Products Pty Limited 2-3 / 22 Harland Avenue Malaga, WA 6090 Australia	CMP Products Texas Inc 5222 N. Sam Houston Pkwy E. Houston, Texas, 77032 USA
E Mail:	cmp@cmp-products.com	perthoffice@cmp-products.com	houstonoffice@cmp-products.com
Website:	www.cmp-products.com	www.cmp-products.com	www.cmp-products.com

1.4. Emergency Telephone number:

UK:- +44(0) 1422 835 835 (office hours only)	*AUSTRALIA:- +61(0) 8 9249 4508 (office hours)	*USA:- +281 776 5201 (office hours only)
*NORWAY:- + 47 22 59 13 00		

Section 2: Hazards identification

2.1. Classification of the substance or mixture

OSHA/HCS status: This material is classified as hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).

NOHSC status: This material is classified as hazardous under NOHSC.

Hazard Category under
NOHSC: Harmful (Xn), Irritant (Xi)

NOHSC Classification: HAZARDOUS SUBSTANCE, NON-DANGEROUS GOOD

CHIP Classification: Xn: R20; Xi: R36/37/38; Xn: R40; Sens.: R42/43; Xn: R48/20

CLP Classification: Carc. 2: H351; Eye Irrit. 2: H319; Resp. Sens. 1: H334; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT RE 2: H373; STOT SE 3: H335; Acute Tox. 4: H332; *EUH204

*Most important adverse effects: Harmful by inhalation. Irritating to eyes, respiratory system and skin. Limited evidence of a carcinogenic effect. May cause sensitisation by inhalation and skin contact. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Poison Schedule: (Australia) This material is a Scheduled S6 Poison and must be stored, handled and used according to the appropriate regulations.



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Warning Statement: Avoid breathing vapours. Avoid skin and eye contact. Breathing vapours may produce asthma-like symptoms. Skin contact may cause allergic reaction.

2.2. Label elements

***Hazardous ingredients:** DIPHENYL METHANE DIISOCYANATE, HOMOLOGUES AND ISOMERS

Label elements under CLP:

Hazard statements: H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335: May cause respiratory irritation.
H351: Suspected of causing cancer.
H373: May cause damage to organs through prolonged or repeated exposure.
*EUH204: Contains isocyanates. May produce an allergic reaction.

Signal words: Danger

Hazard pictograms: GHS07: Exclamation mark
GHS08: Health hazard



Precautionary statements: P202: Do not handle until all safety precautions have been read and understood.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash with soap and water thoroughly after handling.
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 clothing.
P281: Use personal protective equipment as required.
P285: In case of inadequate ventilation wear respiratory protection.
*P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.
*P302+350: IF ON SKIN: Gently wash with plenty of soap and water.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P304+341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+313: IF exposed or concerned: Get medical help.
P312: Call a POISON CENTER or doctor if you feel unwell.
P314: Get medical advice/attention if you feel unwell.
P321: Specific treatment (see on this label).
P332+313: If skin irritation occurs: Get medical attention.
P337+313: If eye irritation persists: Get medical attention.
P342+311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
P362: Take off contaminated clothing and wash before reuse.

Label elements under CHIP: Harmful.

Hazard symbols:



**Label requirements for USA
Hazardous Material :**

Health : 2
Information System (U.S.A.)
Fire Hazard: 1
Reactivity: 1

Health	*	2
Fire hazard		1
Reactivity		1



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National Fire Protection
Association (U.S.A.):
Health: 2
Flammability: 1
Instability: 1



Risk phrases: R20 Harmful by inhalation
R36/37/38: Irritating to eyes, respiratory system and skin.
R40: Limited evidence of a carcinogenic effect.
R42/43: May cause sensitisation by inhalation and skin contact.
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Safety phrases: S23: Do not breathe fumes.
S24: Avoid contact with skin.
*S26: In case of contact with eyes, rinse immediately with plenty of water, contact a poisons information centre or seek medical advice.
S36/37/*38: Wear suitable protective clothing and gloves and in case of insufficient ventilation wear suitable respiratory equipment
*S39: Wear eye/face protection
*S45: In case of accident or if you feel unwell, contact a poisons information centre or seek medical advice immediately (show the label where possible).
S60: This material and its container must be disposed of as hazardous waste.
S63: In case of accident by inhalation, remove casualty to fresh air and keep at rest.

Precautionary phrases: Contains isocyanates. See information supplied by the manufacturer.

2.3. Other hazards

PBT: *This substance is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

DIPHENYL METHANE DIISOCYANATE, HOMOLOGUES AND ISOMERS

EINECS	CAS	CHIP Classification	CLP Classification	Percent
-	9016-87-9	Xn: R20; Xi: R36/37/38; Sens.: R42/43; Xn: R40; Xn: R48/20	Eye Irrit. 2: H319; Acute Tox. 4: H332; Carc. 2: H351; Resp. Sens. 1: H334; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT RE 2: H373; STOT SE 3: H335; -: *EUH204	>90%

*Non-classified/Hazardous ingredients:

NONIONIC POLYMERIC COLOURANT

EINECS	CAS	CHIP Classification	CLP Classification	Percent
-	-	-	-	<1%

All other ingredients not hazardous according to NOHSC criteria.

Section 4: First aid measures

4.1 First Aid measures

Skin contact: If material is splashed onto the skin, immediately remove any contaminated clothing or footwear as applicable and wash skin thoroughly with soap and water. Flush skin with running water. Seek medical attention if after washing irritation persists.

Eye contact: If material is splashed into eyes, immediately, flush with plenty of running water for 15 minutes, ensuring



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eyelids are held open. If irritation persists seek medical attention.

Ingestion: If swallowed, DO NOT INDUCE VOMITING. If person is conscious wash out mouth and give water to drink. Seek medical attention immediately.

Inhalation: Remove casualty from exposure and take to fresh air ensuring one's own safety whilst doing so. Apply resuscitation if victim is not breathing. If trained personnel available administer oxygen if breathing is difficult. Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

Delayed / immediate

effects: Immediate effects can be expected after short-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: First Aid / Eye bathing equipment should be available on the premises

First Aid Facilities: Eye wash fountain, safety shower and normal washroom facilities.

Advice to Doctor: Treat symptomatically. Following severe exposure, medical follow-up should be monitored for at least 48 hours.

Additional information for Australia: In case of poisoning, contact Poisons Information Centre
In Australia Tel: 131126
In New Zealand Tel: 034747000

Section 5: Fire-fighting measures

Flash point : Closed cup: 185°C (365°F) Open cup: 185°C (365°F)

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool fire-exposed containers and for large fires.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing to prevent contact with skin and eyes.

5.5. Hazchem Code: None allocated **[Australia]**

5.6. Flammability: This product is not flammable

Special remarks on Explosion hazards Due to reaction with water producing CO₂-gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Containers may burst if overheated.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Use appropriate personal protective equipment. Refer to section 8 (Exposure Controls / Personal Protection) for personal protection details. Avoid any contact. Evacuate non-emergency personnel from area. If outside, do not approach from downwind, and keep bystanders upwind of spill, and away from danger point. Mark out the contaminated area with signs, barricade area, and prevent access to unauthorised personnel. Ventilate the area as required.



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6.2. Environmental precautions

Environmental precautions: Do not discharge into sewers, drains or rivers. Contain the spillage to prevent contamination of soil, surface water or ground water using bunding. Should the product enter sewer or drains, it should be pumped into a covered vented container, and the cover should be placed loosely on the container, but not made pressure tight. Move container to a well-ventilated area. Emergency Services may need to be called to assist in the clean-up operation.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: A suitable decontaminant material should always be available. Contain and cover all spills with decontaminant, wet earth or wet sand and leave to react for at least 30 minutes. Collect material in suitable and properly labelled open-top containers and remove for further decontamination if necessary. Do not place in sealed containers. Prolonged contact with water will result in a chemical reaction, generating carbon dioxide gas which may cause the container to rupture. Remove to a suitable area that is well ventilated. Clean up affected floor areas. Thoroughly wash contaminated areas with plenty of water. Test the atmosphere for vapours to ensure safe working conditions before personnel may be allowed to return to the affected area.
In USA report the applicable government authorities if the release is reportable. (The CERCLA RQ is 5,000 lbs.)

6.4. Suitable decontaminant solutions:

Formulation 1 - sodium carbonate 5-10%; liquid detergent 0.2-2%; water to make up to 100%.
Formulation 2 - concentrated ammonia solution 3-8%; liquid detergent 0.2-2%; water to make up to 100%.
Note: If ammonia is used, ensure good ventilation to prevent vapour exposure.

6.5. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Not to be opened until ready for use in accordance with the manufacturer's instructions. Wear appropriate protective clothing (see section 8). Avoid direct contact with the substance. Avoid the formation or spread of mists in the air. Do not eat, drink or smoke whilst handling the material.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well-ventilated area, between 5°C and 25°C, out of direct sunlight. Store away from sources of heat or ignition. Store away from oxidising agents. Ensure that containers remain unopened during storage.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:
DIPHENYL METHANE DIISOCYANATE, HOMOLOGUES AND ISOMERS
Workplace exposure limits: Respirable dust

State	TWA 8 timers:	STEL 15 min:	TWA 8 timers:	STEL 15 min:
UK	0.02 mg/m ³	0.07 mg/m ³		
*NO	0.005 ppm	0.1 ppm		

ACGIH TLV (United States, 1/2006).

TWA: 0.05 mg/m³ 8 hour(s). TWA: 0.01 ppm 8 hour(s).

NIOSH REL (United States, 12/2001).

CEIL: 0.2 mg/m³ 10 minute(s). CEIL: 0.02 ppm 10 minute(s).



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TWA: 0.05 mg/m³ 10 hour(s). TWA: 0.005 ppm 10 hour(s).

OSHA PEL (United States, 11/2006).

CEIL: 0.2 mg/m³ 0 hour(s). CEIL: 0.02 ppm 0 hour(s).

OSHA PEL 1989 (United States, 3/1989).

CEIL: 0.2 mg/m³ 0 hour(s). CEIL: 0.02 ppm 0 hour(s)

(Consult local authorities for acceptable exposure limits)

***DNEL/PNEC:** No data available.

8.2. Exposure controls

Engineering measures: Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate unless the use of a local exhaust material is heated, reacted or otherwise changed in some type of chemical reaction, then the ventilation system is recommended. If exhaust ventilation is not available or inadequate, use approved respirator to relevant National Standards.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Avoid breathing of vapours/gases. The use of a respirator for organic vapours with disposable or with replaceable filters is recommended. Filter capacity and respirator type depends on exposure levels and type of contaminant. If entering spaces where the airborne concentration of a contaminant is unknown then the use of a self-contained breathing apparatus (SCBA) with positive pressure air supply is recommended. In Australia, select and use respirators in accordance with AS/NZS 1715/1716. SCBA should comply with AS/NZS 1715/1716.

Hand protection: Wear impervious gloves (e.g. PVC/ nitrile rubber/ neoprene/ polythene) to prevent skin contact.

Eye protection: Wear safety glasses with side shields, chemical goggles or face shield to protect eyes. Ensure eye bath is available.

Skin protection: Wear suitable protective clothing to prevent skin contact.

***Environmental:** Prevent from entering in public sewers or the immediate environment. Ensure emissions from ventilation or equipment comply with environmental protection legislation.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid
Colour: Yellow
Odour: Perceptible odour, slightly musty
Evaporation rate: Negligible
Solubility in water: Insoluble
Also soluble in: Most organic solvents.
Viscosity: Oily
Boiling point/range: 330 °C
Melting Point : Not available
Flash point: Closed cup: 185°C (365°F) / Open cup: 185°C (365°F)
Autoflammability: >500 °C
Vapour pressure: 11 hPa @ 20C
Relative density: 1.23
Acidity: pH: Approx. 7
Oxidizing properties: Not available. > 32 µg/m³ @ 20 °C

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous polymerisations or reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.



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10.4. Conditions to avoid

Conditions to avoid: Heat, flames, ignition sources and incompatibles.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong alkalis. Strong acids. Water. Alcohols. Amines. On contact with water, gaseous decomposition products are formed, which cause build-up of pressure in tightly closed containers. Risk of bursting.
Exothermic reaction with materials containing active hydrogen groups. The reaction becomes progressively more vigorous and can be violent at higher temperature. if the miscibility of the reaction partners is good or is supported by stirring or by the presence of solvents. MDI is insoluble with, and heavier than water and sinks to the bottom but reacts slowly at the interface. A solid water-insoluble layer of polyurea is formed at the interface by liberating carbon dioxide gas.

10.6. Hazardous decomposition products

Hazardous Decomposition Products: In combustion may emit toxic fumes. Release products may include: carbon oxides (CO, CO₂) nitrogen oxides (NO, NO₂...) hydrocarbons and HCN

Section 11: Toxicological information

No adverse health effects are expected, if the product is handled in accordance with this Material Safety Data Sheet and the product label. Symptoms and effects that may arise if the product is mishandled and overexposure occurs are listed below.

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	>2000	mg/kg
DERMAL	RBT	LD50	>2000	mg/kg
VAPOURS	RAT	4H LC50	490	mg/l

*Hazardous ingredients:

DIPHENYL METHANE DIISOCYANATE, HOMOLOGUES AND ISOMERS

DERMAL	RBT	LD50	>2000	mg/kg
DUST/MIST	RAT	4H LC50	490	mg/l
ORAL	RAT	LD50	>2000	mg/kg

Relevant effects for mixture:

Effect	Route	Basis
Acute toxicity (harmful)	INH	Hazardous: calculated
Irritation	OPT INH DRM	Hazardous: calculated
Sensitisation	INH DRM	Hazardous: calculated
Repeated dose toxicity	INH	Hazardous: calculated

11.2 Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact, with effects including itchiness, and possible dermatitis.

Eye contact: There may be redness and irritation to the eyes, with effects including: tearing, pain, stinging and blurred vision. Depending upon duration of exposure, eye damage may occur. The eyes may water profusely.

Ingestion: May cause irritation to the mouth, throat and stomach with effects including mucous build up, irritation to the tongue and lips, and pains in the stomach, which may lead to nausea, vomiting and diarrhoea.

Inhalation: Harmful if inhaled. There may be irritation of the nose, throat and respiratory system with effects



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including: Dizziness, headache, coughing or wheezing, loss of co-ordination and tightness in the chest / chest pains.

Delayed / immediate effects:

Immediate effects can be expected after short-term exposure.

Chronic effects:

Prolonged or repeated skin contact may lead to dermatitis.
Prolonged contact may cause severe eye irritation and some form of permanent eye damage may occur.
Prolonged or repeated exposure may lead to irreversible damage to health.
Prolonged or repeated exposure or deliberately concentrating and inhaling the vapour(s) may result in lung function incapacity or death.
Prolonged or repeated contact with this substance will cause sensitisation by inhalation.
Prolonged or repeated contact with this substance will cause sensitisation by skin contact.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
ZEBRAFISH (Brachydanio rerio)	96H LC50	>1000	mg/l
Daphnia magna	48H EC50	>500	mg/l

***Hazardous ingredients:**

DIPHENYL METHANE DIISOCYANATE, HOMOLOGUES AND ISOMERS

ZEBRAFISH (Brachydanio rerio)	96H LC50	>1000	mg/l
Daphnia magna	48H EC50	>1000	mg/l

12.2. Persistence and degradability

Persistence and degradability:

This substance is not persistent in the environment as it reacts with water or moisture in the air. The reaction product, an inert, insoluble polyurea, is not readily degradable.

12.3. Bioaccumulative potential

Bioaccumulative potential:

No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Mobility in water

Mobility: Insoluble in water and does not disperse readily. It reacts with water forming polyurea, which is solid, insoluble and stable in the environment to both chemical and biological attack.

12.6. Results of PBT and vPvB assessment

PBT identification: *This substance is not identified as a PBT/vPvB substance.

12.7. Chemical Fate Information:

Chemical Fate Information:

Large quantities should not be discharged into drains, sewers or waterways.

12.8. Other adverse effects

Other adverse effects: Negligible ecotoxicity. The product has not been tested. The statement has been derived from the structure of the product.



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Section 13: Disposal considerations

Disposal operations: Do not allow into any sewers, drains, on the ground or into any body of water. Any disposal must be in accordance with applicable State, Territory and/or Local government regulations. Transfer to a suitable container and arrange for collection by specialist waste disposal company. The preferred waste management option for unused, uncontaminated, unformulated, or not otherwise altered material is to send to an approved recycler, reclaimer, or incinerator. The same waste management options are recommended for used or contaminated material, although additional evaluation is required. Waste characterisation and disposal compliance are the responsibility solely of the party generating the waste or deciding to discard or dispose of the material. Chemical additions, processing, storage, or otherwise altering this material may make the waste management information presented here incomplete, inaccurate or otherwise inappropriate.

N.B: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport Class: This product is not classified for transport

*According to European Agreement concerning the International Carriage of Dangerous Goods by Road [ADR] this product is not classified as dangerous in the meaning of transport regulations.

For USA

Regulatory Information	UN number	Shipping Name	Class	PG*	Label	Additional Information
DOT Classification	NA3082	Other Regulated Substances Liquid N.O.S. (Methylene Diphenyl Diisocyanate)	9	III		Reportable Quantity 5000 lbs (2270kg) Single container less than 5000lbs are not regulated
TDG Classification	Not regulated					
IMDG Class	Not Regulated					
IATA DGR Class	Not Regulated					

PG* : Packing group

Section 15: Regulatory information

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

Poison Schedule: S6 (Australia)

15.2 United States Regulatory Information

HCS Classification : Toxic material
Irritant
Sensitizer

U.S. Federal regulations:

United States inventory (TSCA 8b): All components are listed or exempted. TSCA 12(b) one-time export: Chlorobenzene

CERCLA: Hazardous substances.

Components	Concentration	Section 304 CERCLA Hazardous Substance	CERCLA Reportable Quantity	Product Reportable Quantity
Diphenylmethane 4,4'- diisocyanate	62.5	Listed	5000	8000

This product does not contain nor is it manufactured with ozone depleting substances.



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SARA 313

Form R - Reporting requirements:	Product name	CAS number	Concentration
	Diphenylmethane 4,4'- diisocyanate	101-68-8	62.5%

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

California Prop 65: No ingredients listed.
WHMIS (Canada): WHMIS Class D-1A: Material causing immediate and serious toxic effects (Very toxic).
WHMIS Class D-2A: Material causing other toxic effects (Very toxic).
WHMIS Class D-2B: Material causing other toxic effects (Toxic).

CEPA (DSL) : Canada inventory: All Ingredients Listed.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

15.3. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

15.4 Inventory Status

Australia (AICS) Y (Y = all ingredients are on the inventory)

Section 16: Other information

16.1 Level of Risk



The PC6182 Activator and Base are supplied in a small sealed applicator, separated from each other but adequately contained. The applicator is sealed in a foil bag that is limited in size to the ranges outlined in the table below. Although the risk of harm may be high when continuously exposed to substantial volumes of the substance, the risk is considered to be relatively low due to the small package weights / volumes involved. Because of the nature of the packaging of the material, the risks associated with intentional or unintentional misuse may be deemed to be extremely low.

The material is not volatile, either before opening, after opening, after mixing, or after accidental spillage.

CMP Cable Gland Size	Connection Thread Size	Maximum Resin Bag Size	Weight (g) per Bag		Total Weight (g)
			PC6182 Base	PC6182 F Activator	
20S	M20 or 1/2" NPT	1 x 30 cc	20.5	9.1	29.6
20	M20 or 1/2" NPT	1 x 30 cc	20.5	9.1	29.6
25	M25 or 3/4" NPT	1 x 30 cc	20.5	9.1	29.6
32	M32 or 1" NPT	1 x 30 cc	20.5	9.1	29.6
40	M40 or 1-1/4" NPT	1 x 30 cc	20.5	9.1	29.6
50S	M50 or 1-1/2" NPT	1 x 80 cc	56.0	24.5	80.5
50	M50 or 2" NPT	1 x 80 cc	56.0	24.5	80.5
63S	M63 or 2" NPT	2 x 80 cc	56.0	24.5	161.0
63	M63 or 2-1/2" NPT	2 x 80 cc	56.0	24.5	161.0
75S	M75 or 2-1/2" NPT	2 x 80 cc	56.0	24.5	161.0
75	M75 or 3" NPT	3 x 80 cc	56.0	24.5	241.5
90	M90 or 3-1/2" NPT	3 x 80 cc	56.0	24.5	241.5
100	M100 or 4" NPT	4 x 80 cc	56.0	24.5	322.0



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16.2 Other Information.

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in sections 2 and 3:

H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335: May cause respiratory irritation.
H351: Suspected of causing cancer
H373: May cause damage to organs through prolonged or repeated exposure
R20: Harmful by inhalation.
R36/37/38: Irritating to eyes, respiratory system and skin.
R40: Limited evidence of a carcinogenic effect.
R42/43: May cause sensitisation by inhalation and skin contact.
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.
*EUH204: Contains isocyanates. May produce an allergic reaction.

*Legend to abbreviations:

PNEC = predicted no effect concentration
DNEL = derived no effect level
LD50 = median lethal dose
LC50 = median lethal concentration
EC50 = median effective concentration
IC50 = median inhibitory concentration
dw = dry weight
bw = body weight
cc = closed cup
oc = open cup
MUS = mouse
GPG = guinea pig
RBT = rabbit
HAM = hamster
HMN = human
MAM = mammal
PGN = pigeon
IVN = intravenous
SCU = subcutaneous
SKN = skin
DRM = dermal
OCC = ocular/corneal
OPT = optical
INH = inhalation
PCP = physico-chemical properties

Legal disclaimer: This MSDS summarises our best knowledge of the health and safety hazard information available on the product and the measures to be used to handle and use the product safely. Each user should read this MSDS and consider the information in connection with the way the product is intended to be handled or used. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Key Legend Information:

CHIP – Chemicals (Hazardous Information and Packaging for Supply)
CLP – Classification, Labelling and Packaging of Substances and Mixtures
EINECS – European Chemical Substance Information System
CAS – Chemicals Abstracts Service
TWA - Time Weighted Average (International)
STEL - Short Term Exposure Limit (International)
EPA - Environmental Protection Agency (International)
NIOSH - National Institute for Occupational Safety and Health [US]
IATA - International Aviation Transport Authority (International)
ICAO - International Civil Aviation Organization (International)
IMO - International Maritime Organisation. (International)



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IMDG - International Maritime Dangerous Goods (International)

*NOHSC - National Occupational Health and Safety Commission [Australia]

*NO - Norway

*OSHA/HSC - Occupational Safety & Health Administration / Hazard Communication Standard

United Nations Recommendations for the Transport of Dangerous Goods and Globally

Harmonized System for the classification and labelling of Chemicals. (International)

EU - European Union

[US] = United States of America

For full compliance please contact your Federal, State or Local regulators for further information.

Principal References:

Information supplied by manufacturer, reference sources including the public domain.