

# MATERIAL SAFETY DATA SHEET



## PCT International Pty Ltd

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# PCT REACTOR<sup>TM</sup> PENETRANT

Classified as hazardous according to criteria of NOHSC

## 1. IDENTIFICATION OF THE PRODUCT AND THE MANUFACTURER

**Product Name:** PCT Reactor Penetrant  
**Product Code:** none  
**Product Use:** A non-ionic wetter / spreader / penetrant for use with agricultural pesticides  
**Supplier:** PCT International Pty Ltd  
**ABN:** 44 101 170 923  
**Street Address:** Unit 1 / 74 Murdoch Circuit, ACACIA RIDGE QLD 4110  
**Telephone:** + 61 7 3711 7022  
**Facsimile:** + 61 7 3711 7055  
**Emergency telephone number:** 07 3711 7022

**Other Information:** This MSDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

**Creation Date:** 11<sup>th</sup> August 2011

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

**Chemical Characterization:** Liquid

Ingredients	CAS NO.	Proportion (% weight/weight)
Oxirane, methyl-, polymer with oxirane, mono(3-1,3,3,3-tetramethyl-1-((trimethylsilyl)oxy)disiloxanyl)propyl) ether	134180-76-0	75%
other ingredients not considered to be hazardous		to 100%

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## 3. HAZARDS IDENTIFICATION

### Emergency Overview

### Physical Appearance

<b>Form</b>	Liquid
<b>Colour</b>	Light Yellow
<b>Odour</b>	Characteristic
<b>Water Solubility</b>	Soluble
<b>pH</b>	8

### Potential Health Effects

**Immediate Concerns** Harmful by inhalation and in contact with skin. Irritating to skin. Risk of serious damage to eyes. Toxic for aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Eyes** Severely irritating to the eyes

**Skin** May cause slight irritation

**Ingestion** May be slightly toxic based on acute animal studies. Exact effects on humans are not known.

**Inhalation** May be slightly toxic based on acute animal studies. Exact effects on humans are not known.

**Primary Routes of Entry** Eyes, Skin, Inhalation, Ingestion

**Target Organs** Eyes, Skin, Respiratory Tract, Digestive System

**Carcinogenicity** Not listed by NTP, IARC, ACGIH or OSHA as a carcinogen

## 4. FIRST AID MEASURES

**Eyes** Flush eye(s) for 15 minutes or more; If irritation persists, consult a doctor (preferably an eye specialist) and show MSDS.

**Skin** Wash affected areas immediately and thoroughly with soap and water.

**Ingestion** Rinse mouth and then drink plenty of water.

**Inhalation** If swallowed seek medical advice and show MSDS.

**Inhalation** Remove affected person from site of exposure to fresh air until recovered.

**Inhalation** If not breathing, give artificial respiration. If breathing is difficult give oxygen.

**Inhalation** Get Immediate medical attention.

**First Aid Facilities** If poisoning occurs, contact a doctor or Poisons Information Centre on **13 11 26** (Australia).

**General Advice** Remove soiled or soaked clothing immediately

## 5. FIRE-FIGHTING MEASURES

**Flash Point** 216°F (102°C) Method - TAG C/C

**Autoignition**

**Temperature** Not measured.

**Upper Explosion Limits** Not measured.

**Lower Explosion Limits** Not measured.

**Suitable Extinguishing**

**Media** Foam, carbon dioxide, dry powder, water spray

**Extinguishing**

**Media which must not be used for safety reasons** Not applicable

**By-products in case of Fire** In the event of a fire the following can be released:

-carbon monoxide, carbon dioxide, silicon dioxide

**Further Information** Collect contaminated firefighting water separately- must not be discharged into drains.

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**Special Protective Equipment for Firefighters** As in any fire, water, self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

**Hazardous Decomposition Products** None with proper storage and handling.

**OSHA Flammable Class** Combustible Liquid, Class 111B

## 6. ACCIDENTAL RELEASE MEASURES

**Methods for Cleaning Up/ Taking Up** Small Spills:  
Use personal protective equipment.  
Prevent from entering drains, waterways or sewers. Do not discharge into the subsoil/soil. Take up with absorbent material (eg. Sand, Vermiculite)

## 7. HANDLING AND STORAGE

**General Procedures Handling Advice on safe handling :** Formation of aerosols or vapours during application should be prevented.

Wear respiratory protection when spraying.

**Advice on protection against fire and explosion** No special measures required.

**Storage Further information** Keep container tightly closed

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### OSHA hazardous components (29 CFR 1910.1200)

Components	CAS No	Basis	Type	Value	Note
Oxirane, methyl-, polymer with oxirane, mono(3-1,3,3,3-tetramethyl-1-((trimethylsilyl)oxy)disiloxanyl)propyl ether	134180-76-0	OSHA PEL	TWA		Not established

**Personal Protective Equipment**

**General protective Measures** Avoid contact with eyes and skin  
Do not inhale aerosols.

**Hygiene Measures** No smoking, eating or drinking allowed when using this product.  
Wash hands before breaks and at end of work shift.  
Protective ointment is recommended.

**Respiratory Protection** In case of formation of aerosols or vapours, an organic vapour cartridge respirator may be used.

**Hand Protection** PVC Gloves

**Eye Protection** Safety goggles and/or face shield is recommended for use.

**Protective clothing** Light protective clothing is required.

**Engineering Controls** Good general (mechanical) ventilation should be sufficient to control airborne levels.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Light yellow liquid
<b>Odour</b>	Characteristic
<b>Solubility in Water</b>	Soluble
<b>Specific Gravity (H<sub>2</sub>O=1)</b>	approx. 1.02g/cm <sup>3</sup>
<b>pH Value</b>	8 at 40g/L water at 25°C
<b>Vapour Pressure</b>	not measured
<b>Melting Temperature</b>	not measured
<b>Boiling temperature</b>	not measured
<b>Viscosity, dynamic</b>	approx. 40-90 mPa.s at 25°C Method: DIN 53019
<b>Volatile organic Compound</b>	15.15g/L - percent non-volatile 98.5%

## 10. STABILITY AND REACTIVITY

<b>Conditions to avoid Thermal decomposition</b>	None with proper storage and handling
<b>Hazardous reactions</b>	Not measured
<b>Hazardous Polymerization</b>	No hazardous reactions with proper storage and handling
<b>Stability</b>	No
<b>Hazardous decomposition products</b>	Yes
	None with proper storage and handling

## 11. TOXICOLOGICAL INFORMATION

<b>Acute Toxicity - Oral</b>	LD <sub>50</sub> (rat) 3,200mg/kg
<b>Acute Toxicity - Inhalation</b>	LD <sub>50</sub> (rat) 1.08mg/L exposure time 4h Method OECD 403, Source: Untersuchungsbericht/Th. Goldschmidt AG
<b>Acute Toxicity - Dermal</b>	LD <sub>50</sub> (rabbit) 1550mg/kg
<b>Eye Irritation</b>	Species: rabbit strongly irritant
<b>Skin Irritation</b>	Species: rabbit slightly irritant
<b>Skin Sensitisation</b>	Species: guinea pig non-sensitising
<b>Note</b>	harmful by inhalation and in contact with skin Irritant to skin Risk of serious damage to eyes The toxicological data refer to the undiluted 100% product.

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity Effects</b>	
<b>Acute Toxicity - Fish</b>	LC <sub>50</sub> for <i>rainbow trout</i> is 2.1 mg/l.
<b>Acute Toxicity - Daphniae</b>	EC <sub>50</sub> for <i>daphnia magna</i> is 1.1 mg/l.
<b>Acute Toxicity - Algae</b>	EC <sub>50</sub> for <i>scenedesmus subspicatus</i> is 28.3mg/l refer to biomass EC <sub>50</sub> for <i>scenedesmus subspicatus</i> is 152.2mg/l growth rate
<b>Further ecological information</b>	
<b>Ecological notes</b>	The product is considered to be a water pollutant (German law) Do not discharge product unmonitored into the environment. The ecotoxicological data refer to the undiluted 100% product.

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The product does not cause essential disturbances of ecological processes and equilibriums, when used in the recommended concentrations and ways of applications.

## 13. DISPOSAL CONSIDERATIONS

**Dispose of in accordance with local, state and federal regulations.**

<b>Product Disposal</b>	In accordance with local authority regulations, take to special waste incineration plant.
<b>Container Disposal</b>	Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

## 14. TRANSPORT INFORMATION

<b>Storage and Transport</b>	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by <b>Road and Rail</b> . The below classification refers to sea shipments only.
<b>U.N. Number</b>	3082
<b>DG Class</b>	9
<b>Hazchem Code</b>	None Allocated
<b>Hazard Release</b>	Polyethersiloxane
<b>Packing Group</b>	III



## 15. REGULATORY INFORMATION

<b>Risk Phrase</b>	R20/21 Harmful by inhalation and contact with skin. R38 Irritating to skin R41 Risk of serious damage to eyes
<b>Safety Phrase</b>	S24 Avoid Contact with skin S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection
<b>Poisons Schedule</b>	Not scheduled
<b>Packaging &amp; Labeling</b>	READ SAFETY DIRECTIONS BEFORE OPENING OR USING
<b>Hazard Category</b>	
<b>AICS (Australia)</b>	Listed on the Australian Inventory of Chemical Substances.
<b>APVMA Approval No</b>	60851/0306

## 16. OTHER INFORMATION

**Contact Person/Point** Mr David Pearson Phone: (07) 3711 7022  
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...End of MSDS...