



## MATERIAL SAFETY DATA SHEET

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MSDS No. 1001

### STATEMENT OF HAZARDOUS NATURE

Hazardous according to the criteria of Worksafe Australia.

### COMPANY DETAILS

Company Scotts Australia Pty. Ltd.  
Address 11 Columbia Way, Baulkham Hills, NSW, 2153  
Telephone Number (02) 8853 7300  
Fax (02) 8853 7310  
Emergency Telephone Number Australia: 1800 033 111  
New Zealand: 0800 734 607

### IDENTIFICATION

Product Name **DEFENDER HOME GARDEN BLACKBERRY PLUS TREE KILLER**  
Other Names Defender Blackberry Plus Tree Killer  
Manufacturers Product Code 190320  
UN Number None allocated  
Dangerous Goods Class Not a Dangerous Good  
Sub-Risk Class -  
Packaging Group -  
Hazchem Code -  
Poisons Schedule S6 POISON

Uses Herbicide

### Physical Description /Properties

Appearance & Odour Liquid, clear light colour with faint sweet odour  
Melting point/softening point  
Boiling Point About 196°C  
Vapour Pressure Triclopyr: 1.2 x 10<sup>-6</sup>mm Hg.  
Flashpoint 96°C (Tag open cut)  
Flammability Limits Not flammable  
Solubility in Water N/A  
pH  
Incompatibility  
Specific Gravity 1.021  
Bulk density  
Volatile Proportion

### Ingredients

Ingredient	Chemical Name	CAS Number	Proportion % w/v
Active ingredients	Triclopyr, present as the butoxyethanol ester	64700-56-7	5% (as acid equivalent)
Inerts	Ethyl Di Icinol (Diethylene glycol monoethyl ether)	111-90-0	>90%

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KILLER**

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<b>HEALTH HAZARD INFORMATION</b>
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**Health Effects**

*Acute*

Swallowed

Triclopyr is moderately toxic by ingestion. Ingestion of small amounts is not likely to cause injury. Breathing difficulties can occur from ingestion of Ethyl Di Icinol, which has about the same acute toxicity by ingestion as ethylene glycol in animals. No adequate data exist for human comparison. However poisonings produce similar symptoms to those of ethylene glycol.

Eye

This product may be an eye irritant.

Skin

Diethylene glycol monoethylether does not penetrate the skin and therefore is essentially non-irritant to human skin. A single exposure is not likely to result in irritation. However, repeated or prolonged contact with the finished product may lead to irritation, due to the Triclopyr.

Inhaled

Not considered a likely source of exposure when handling this product.

*Chronic*

Rats administered ethylene glycol, which is said to have similar toxicity to diethylene glycol monethyl ether, develop oxalate crystals in urine and kidney damage (both effects only occur in male rats only) after feeding with 178mg/kg/day for 16 days. Studies with ethylene glycol and diethylene glycol show no evidence of carcinogenicity in rats. No teratogenic effects have been found with ethylene glycol in animal tests. However, Triclopyr is teratogenic and causes reproductive abnormalities.

In summary, repeated, excessive exposure to this product may cause kidney, liver or blood effects. Excessive exposures during pregnancy could contribute to developmental abnormalities in offspring.

**First Aid**

Swallowed

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26; New Zealand 0800 764 766. If swallowed, do NOT induce vomiting. Give a glass of water.

Eye

Hold eye open and wash continually with water for at least 15 minutes. Lift upper and lower lids to ensure complete irrigation of the eye. Seek medical attention if irritation persists.

Skin

Remove contaminated clothing and wash affected area thoroughly with soap and water. If skin is irritated, seek medical attention.

Inhaled

Not applicable.

First Aid Facilities

Eyewash, Ipecac Syrup APF, washing facilities.

**Advice to Doctor**

Treat symptomatically.

Medical conditions

which may be aggravated  
by contact

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**PRECAUTIONS FOR USE**

Exposure Standards	The exposure limit recommended for Triclopyr is 4mg/m <sup>3</sup> . The value is expressed as time weighted average (TWA) concentration over 8 hours working shift, for a 5 day working week. It is the manufacturer's recommended exposure limit (Dow Chemical, 1991). Women of child-bearing age should take precautions to ensure no excessive exposures during handling of this product. Safety glasses and rubber gloves are recommended when handling this product to avoid any contact with eyes and skin. Wash hands thoroughly after use with soap and water.
Engineering Controls Personal Protection Flammability	Natural ventilation should be adequate.  This product is combustible. Keep potential sources of ignition away from the product.

**SAFE HANDLING INFORMATION**

Storage and Transport	Store away from seeds, fertilizers, animal and human food stuffs. Store in a cool, dry area, away from heat, sparks, open flame and oxidizers. Keep containers securely sealed.
Spills and Disposal	Wear rubber or PVC boots, gloves and safety glasses during clean up operation. Collect spillage with non-combustible absorbent materials (e.g. sand, vermiculite). Prevent spillage from entering drains or waterways. Place residue in flammable waste containers. Consult State Land Waste Management Authority for disposal.
Fire/Explosion Hazard	On burning, triclopyr gives rise to toxic chloride fumes and oxides of nitrogen. Avoid contamination with oxidising agents.

**OTHER INFORMATION**

Environmental Protection Animal Toxicity Data	Triclopyr is highly toxic to fish. Degrades in soil with microbial activity. Soil half-life of 20-45 days. Keep away from dams, creeks and other waterways. <b>Triclopyr</b> Oral LD50 (rabbit) 550mg/kg Oral LD50 (guinea pig) 310mg/kg TDLo Oral (rat) 1550mg/kg with reproductive effects TDLo Oral (rat) 6-15d with teratogenic effects
APVMA Registration No.	<b>Ethyl di Icinol (ethylene glycol)</b> Oral LD50 (rat, mouse) 4700-8690mg/kg 31896

**CONTACT POINT**

Emergency Response for Transport and Exposure:	Scotts Australia Pty Ltd
Australia: 1800 033 111	11 Columbia Way
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