

## MATERIAL SAFETY DATA SHEET

**STATEMENT OF HAZARDOUS NATURE:**  
Hazardous according to the criteria of NOHSC

**COMPANY DETAILS:**

Syngenta Crop Protection Pty Limited  
ABN 33 002 933 717  
140-150 Bungaree Rd.,  
PENDLE HILL, NSW, 2145

Telephone No.: (02) 9688 0444  
24 Hours Emergency No.: 1 800 033 111

### IDENTIFICATION

**PRODUCT NAME:** Flowable IGRAN<sup>®</sup> 500 SC Liquid Herbicide

<b>Formulation type:</b>	suspension concentrate (ie flowable aqueous suspension)	<b>Dangerous Goods Class/ and Subsidiary Risk (ADG):</b>	none allocated
<b>Active Ingredient:</b>	Terbutryn	<b>Hazchem Code:</b>	none allocated
<b>Product Code No.:</b>	R-436/130/2	<b>Packing Group:</b>	none allocated
<b>Chemical type:</b>	Triazine	<b>Poisons Schedule:</b>	5
<b>UN Number:</b>	none allocated		

**USE:** Herbicide for the control of certain early competing broadleaf weeds in wheat, barley, triticale, pastures, and some varieties of oats as shown in the Directions for Use table on the product label.

### PHYSICAL DESCRIPTION/PROPERTIES

<b>Appearance:</b>	yellow liquid	<b>Flash point:</b>	not detected
<b>Odour:</b>	non-specific	<b>Flammability:</b>	non-flammable
<b>Vapour pressure:</b>	< 0.6 mPa	<b>Behaviour in water:</b>	suspensible
<b>Specific gravity:</b>	1.06 (20°C)		

### OTHER PROPERTIES

<b>Explosive properties:</b>	Not explosive	<b>Oxidising properties:</b>	Non-oxidising
<b>Viscosity:</b>	400-800 cps	<b>Corrosiveness:</b>	Non-corrosive
<b>Thermal sensitivity:</b>	Not sensitive	<b>Combustibility:</b>	Non-combustible
<b>Self-heating properties:</b>	Not self-heating	<b>Volatility:</b>	Not available

### INGREDIENTS

	CAS No.	Content (%w/v)
<b>Terbutryn (technical grade)</b>		>50
to give terbutryn	886-50-0	50
Propylene glycol	57-55-6	<10
Triethanolamine salt alkylbenzene sulphonate	27323-41-7	<10
Fatty acid methyl tauride, sodium salt	137-20-2	<10
Ammonia	7664-41-7	<1
Other ingredients determined not to be hazardous		30-<60

### HEALTH HAZARD INFORMATION

#### HEALTH EFFECTS

**ACUTE**

**Toxicity** - This product is slightly hazardous (WHO Class III)

Swallowed:

**LOW TOXICITY**

Tests on rats indicate a low toxicity following a single dose of a similar undiluted product.

(LD<sub>50</sub> > 3,000 mg/kg)

Dermal absorption:	<b>LOW TOXICITY</b> Tests on rats indicate a low toxicity due to skin contact with a similar undiluted product. (LD <sub>50</sub> > 4,000 mg/kg)
Inhaled:	<b>LOW TOXICITY</b> Tests on rats indicate a low toxicity due to inhalation of a similar undiluted product. (LC <sub>50</sub> (1h) > 348 mg/m <sup>3</sup> , highest attainable concentration)
<b><u>Irritation</u></b>	(Based on studies with rabbits)
Eye:	<b>SLIGHT IRRITANT</b>
Skin:	<b>SLIGHT IRRITANT</b>
<b><u>Skin Sensitisation</u></b>	(Based on studies on guinea pigs with the active ingredient) <b>NOT SENSITISING</b>

**CHRONIC** (Active Ingredient)

**Terbutryn technical** has been extensively tested on laboratory mammals and in test-tube systems. No evidence of mutagenic, teratogenic or reproductive effects was obtained for mice and male rats. Long-term administration did not lead to any tumour forming effects in mice; however in rats, extremely high feeding doses (equivalent to approximately 10.5 g/day for a 70kg person) resulted in an increase in the incidence of thyroid tumours in the males and benign liver tumours in the females. The relevance of these findings to humans is heavily doubted.

**FIRST AID**

**In case of poisoning by any exposure route contact a doctor or Poisons Information Centre. Phone 131 126.**

Swallowed:	If swallowed, and if more than 15 minutes from a hospital, induce vomiting, preferably using Ipecac Syrup APF.
Eye:	If product gets in eyes, wash it out immediately with water.
Skin:	Remove any contaminated clothing and wash affected areas thoroughly with soap and water.
Inhaled:	Move affected person to fresh air and keep at rest until recovered.

**ADVICE TO DOCTOR**

No specific antidote exists. Treat symptomatically.

**PRECAUTIONS FOR USE****ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS****EXPOSURE STANDARDS**

No exposure standards have been set for the components of this product.

**Exposure Potential** - Swallowing is unlikely under normal conditions of usage. Significant skin uptake does not occur. Inhalation is a possible route of exposure. This product is diluted with water prior to use as a spray. This diluted form is less toxic by all routes of exposure.

**Re-entry Period** - Do not enter treated areas without protective clothing until the spray has dried.

**ENGINEERING CONTROLS**

No special requirements. Product is used outdoors.

**PERSONAL PROTECTION**

Harmful if swallowed. Avoid contact with skin. Repeated exposure may cause allergic disorders. When using the product wear elbow-length PVC gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves.

**FLAMMABILITY**

This product is NON-FLAMMABLE and non-combustible.

## SAFE HANDLING INFORMATION

### STORAGE AND TRANSPORT

Store in tightly sealed original containers in a dry secure place away from fertilisers, seed, feed and food. Store out of direct sunlight. Keep out of reach of children, unauthorised persons and animals.

#### Transport Classification – Sea (IMDG):

<b>UN No:</b>	3082	<b>Proper Shipping Name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
<b>Class:</b>	9		
<b>Packing Group:</b>	III	<b>Additional information:</b>	TERBUTRYN 50%, MARINE POLLUTANT

### SPILLS AND DISPOSAL

In case of spillage it is important to take all steps necessary to:

- Avoid eye and skin contact.
- Avoid contamination of waterways.

#### *Procedure for spill:*

- (1) Keep all bystanders away.
- (2) Wear full length clothing and PVC gloves.
- (3) Reposition any leaking containers so as to minimise further leakage.
- (4) Dam and absorb spill with an absorbent material (e.g. sand or soil).
- (5) Shovel the absorbed material into drums.
- (6) Disposal of the absorbed material will depend upon the extent of the spill.
  - For quantities up to 50 L of product bury in a secure landfill site.
  - For quantities greater than 50 L seek advice (use emergency contact number below) from the manufacturer before attempting disposal. Contain in a secure location until disposal method is established.
- (7) Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable.

#### *Dispose of empty, used containers by:*

- (a) Triple rinsing or preferably pressure rinsing with water. Add rinsings to the spray tank. Do not dispose of undiluted chemicals on site.
- (b) If recycling, replace cap and return clean containers to recycler or designated collection point.
- (c) If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm 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.

### FIRE/EXPLOSION HAZARD

This product is non-flammable, non-explosive and non-combustible. Extinguish warehouse and factory fires using fine water-spray or foam. Do not allow fire-water to enter drains.

### OTHER INFORMATION

**Terbutryn technical** is toxic to fish [LC<sub>50</sub> (96 h), rainbow trout = 3.0 mg/L] and has low toxicity to birds (10 day dietary LC<sub>50</sub> for mallard ducks > 4640 ppm). Terbutryn is non-toxic to bees.

**Note:** This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Federal health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

**CONTACT POINT:** Regulatory Affairs Manager - Crop Protection - (02) 9688 0444  
**24 HOURS EMERGENCY CONTACT: 1 800 033 111**

This Material Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

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