

## MATERIAL SAFETY DATA SHEET

**STATEMENT OF HAZARDOUS NATURE:**  
Not 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: ENVOKE Herbicide

<b>Formulation type:</b>	Water dispersible granules	<b>Dangerous Goods Class/ and Subsidiary Risk:</b>	Not required for Sales pack
<b>Active Ingredient:</b>	Trifloxysulfuron sodium	<b>Hazchem Code:</b>	2X
<b>Product Code No.:</b>	A9842A	<b>Packaging Group:</b>	III
<b>Chemical type:</b>	Sulfonylurea	<b>Poisons Schedule:</b>	Not scheduled
<b>UN Number:</b>	Not required for sales pack		

**USE:** Herbicide for the post emergent control of various broadleaf weeds and annual grasses in cotton. Refer to the product label for full directions for use.

### PHYSICAL DESCRIPTION/PROPERTIES

<b>Appearance:</b>	Beige granules	<b>Flash point:</b>	Not applicable
<b>Odour:</b>	Non-specific	<b>Flammability:</b>	Not flammable
<b>Behaviour in water:</b>	Dispersible	<b>Combustibility:</b>	Combustible

### OTHER PROPERTIES

<b>Spontaneous decomposition:</b>	Excluded	<b>Chemical stability:</b>	Stable under standard conditions
<b>Explosive properties:</b>	Non-explosive	<b>Thermal sensitivity:</b>	Not sensitive to heat
<b>Sensitivity to humidity:</b>	Not sensitive to humidity	<b>pH:</b>	8 – 12 (in 1% deion. water)
<b>Sensitivity to light:</b>	Not sensitive to light	<b>Bulk density:</b>	0.6 – 0.8 g/cm <sup>3</sup>

### INGREDIENTS

	CAS No.	Content (%w/v)
<b>Trifloxysulfuron sodium (technical grade)</b>	145099-21-4	75
Silica (diatomaceous earth)	61790-53-2	10 - 20
Naphthalenesulfonic acid, dibutyl sodium salt	25417-20-3	2 - 5
other ingredients determined not to be hazardous		10 - 15

## HEALTH HAZARD INFORMATION

### HEALTH EFFECTS

#### ACUTE

**Toxicity** - This product is unlikely to present acute hazard under normal use. (WHO Hazard Class III)

Swallowed:	<b>LOW TOXICITY</b> Tests on rats indicate low toxicity following a single oral dose of the product. (LD <sub>50</sub> > 5000 mg/kg)
Dermal absorption:	<b>LOW TOXICITY</b> Tests on rats indicate low toxicity following dermal application of the product. (LD <sub>50</sub> > 2000 mg/kg)
Inhaled:	<b>LOW TOXICITY</b> Tests on rats indicate low toxicity following inhalation of the active ingredient, trifloxysulfuron sodium. (LD <sub>50</sub> 4hr > 5.03mg/L)

**Irritation** (Based on rabbit studies with the product)  
Eye: **NON IRRITANT**  
Skin: **NON IRRITANT**

**Skin Sensitisation** (Based on guinea pig assessment with the product)  
**NON-SENSITISER**

**CHRONIC** (Active Ingredient)

Trifloxysulfuron has been extensively tested for chronic toxicity assessment. No evidence of carcinogenic, mutagenic, teratogenic or reproductive effects was obtained.

**FIRST AID**

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

Swallowed: If poisoning occurs contact a doctor or Poisons Information Centre. Administer medicinal charcoal in a large quantity of water. Do not induce vomiting.  
Eye: If product gets in eyes, wash it out immediately with water  
Skin: Remove 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**

<b>Ingredient</b>	<b>Occupational Exposure Limit</b>
Silica	2 mg/m <sup>3</sup> of air (NOHSC – time weighted average)

No official exposure standards have been set for the other ingredients of this product.

No official exposure standards have been set for the product or its ingredients.

**Exposure Potential** - Swallowing is unlikely under normal conditions of usage. Significant skin uptake is unlikely to occur. Inhalation of spray mist 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**

Will irritate the eyes and skin. Avoid contact with eyes and skin. When preparing spray wear cotton overalls buttoned to the neck and wrist or equivalent clothing..

**FLAMMABILITY**

Product is NON FLAMMABLE. Product is combustible at elevated temperatures.

## 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 – Road and Rail (ADR):

<b>UN No.:</b>	3077	<b>Proper Shipping Name:</b>	ENVIRONMENTALLY HAZARDOUS
<b>Class:</b>	9		SUBSTANCE, SOLID, N.O.S.
<b>Packing Group:</b>	III	<b>Additional Information:</b>	TRIFLOXYSULFURON SODIUM 75%

### 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) **For a product spill:** Sweep granule concentrate into a pile.  
**For a prepared spray spill:** Dam and absorb spill with an absorbent material (e.g. sand or soil).
- (5) Shovel the absorbed material or granule concentrate into drums.
- (6) Disposal of the absorbed material will depend upon the extent of the spill.
  - For quantities up to 50kg of product bury in a secure landfill site.
  - For quantities greater than 50kg seek advice from the manufacturer (use emergency contact number below) 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) Single rinse before disposal. Add the rinsings to the spray tank.
- (b) DO NOT dispose of undiluted chemicals on site.
- (c) 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 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-explosive. Product is combustible. Extinguish warehouse and factory fires using fine-water spray or foam. During a fire this product may release smoke and hazardous decomposition products such as nitrogen oxides, carbon monoxide, sulfur dioxide and hydrogen fluoride. When fighting a major fire wear an air-supplied respirator. Do not allow fire-water to enter drains.

### OTHER INFORMATION

**Trifloxysulfuron sodium** is practically non-toxic to fish, [LC<sub>50</sub> (96hr) rainbow trout > 146 mg/L], highly toxic to algae [IC<sub>50</sub> (growth inhibition for green algae, 72hr) = 0.043 mg/L] and is practically non-toxic to aquatic invertebrates [EC<sub>50</sub> (48h, *Daphnia magna*) > 139 mg/L]. ENVOKE Herbicide is practically non-toxic to birds, bees, earthworms and invertebrates.

**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.

<b>CONTACT POINT:</b> Regulatory Affairs Manager - Crop Protection - (02) 9688 0444 <b>24 HOURS EMERGENCY CONTACT:</b> 1 800 033 111
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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.