

# MATERIAL SAFETY DATA SHEET



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**Emergency Contact:**  
**1800 033 111**

## SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **eChem Staroxy 200 Herbicide**

**Full Product Name:** eChem Staroxy 200 Herbicide.  
**Other Names:** Fluroxypyr. Group I Herbicide.  
**Use:** Agricultural herbicide for the control of a range of broadleaf weeds.  
**Company:** eChem (Australia) Pty Ltd  
**Address:** 419 Frome Street, Moree NSW 2400  
**ACN/ABN:** 089 133 095  
**Telephone Number:** 02 6750 8019 **Fax Number:** 02 6752 3123  
**Emergency Contact:** 1800 033 111

## SECTION 2 HAZARDS IDENTIFICATION

**Classified as hazardous according to criteria of Safe Work Australia.  
Not classified as a Dangerous Good according to the ADG Code.  
Combustible Liquid (C1).**

**Risk phrases:** R65 Harmful: May cause lung damage if swallowed.  
**Safety Phrases:** S2 Keep out of reach of children.  
S13 Keep away from food, drink and animal feedstuffs.  
S23 Do not breathe vapour or spray.  
S24/25 Avoid contact with skin and eyes.  
S36/37 Wear suitable protective clothing and gloves.

## SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

### Ingredients:

<b>CHEMICAL</b>	<b>CAS NUMBER</b>	<b>PROPORTION</b>
Fluroxypyr meptyl	81406-37-3	200 g/L
Hydrocarbon liquid	64742-94-5	596 g/L
Other ingredients (including water) determined not to be hazardous		to 100%

Trace quantities of impurities are possible.

## SECTION 4 FIRST AID MEASURES

### FIRST AID

**Ingestion:** If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 13 11 26. DO NOT induce vomiting. Give a glass of water.  
**Eye contact:** If in eyes, immediately flush gently with running water until chemical is removed. If irritation occurs and persists, obtain medical attention.  
**Skin contact:** Remove contaminated clothing and launder before re-use. Wash skin thoroughly with soap and water. If skin irritation persists, seek medical advice.

**SECTION 4 FIRST AID MEASURES (Continued)**

**Inhalation:** Remove to fresh air and observe until recovered. If irritation or symptoms persist, seek medical advice.

**Advice to Doctor:** Treat symptomatically. Fluroxypyr meptyl, the active ingredient in this product is considered to have low toxicity. The formulation contains hydrocarbon liquid that if aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary oedema. Treatment is otherwise symptomatic and supportive.

**SECTION 5 FIRE FIGHTING MEASURES**

**Specific Hazard:** Combustible liquid (C1). Eruption of containers is likely if confined at high temperatures. Intact containers exposed to excessive heat should be cooled with water to reduce drum pressure.

**Extinguishing media:** Extinguish fire using foam, carbon dioxide, foam, dry agent or water spray. Contain all runoff.

**Hazards from combustion products:** Will produce toxic and corrosive vapours when burnt. Will not polymerise.

**Precautions for fire-fighters and special protective equipment:** Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke or vapours generated. Contain all runoff.

**SECTION 6 ACCIDENTIAL RELEASE MEASURES**

**Emergence procedures / Material and methods for containment and cleanup procedures:** Clear area of all unprotected personnel. Wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, a face shield or goggles to prevent skin contamination. In the case of spillage, stop leak if safe to do so and contain and absorb spilled material with absorbent material such as sand, clay or cat litter. Vacuum, shovel or pump spilled material into an approved container and dispose of waste as indicated in section 13 or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Collect spilled material and place in a sealable container for safe disposal. Keep out animals and unprotected persons. Keep ignition sources well away from the area. Contain all runoff.

To decontaminate spill area, tools and equipment wash with a suitable solution (eg organic solvent, detergent, bleach or caustic) and add the solution to the drums of waste already collected.

**SECTION 7 HANDLING AND STORAGE**

**Precautions for safe Handling:** No smoking, eating or drinking should be allowed where material is used or stored. Avoid contact with eyes and skin. When opening the container, preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, a face shield or goggles. Wash hands after use. After each day's use wash gloves, face shield or goggles and contaminated clothing.

**Conditions for safe Storage:** Store product in the closed, original container in a cool, well ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight. This product is classified as a C1 (Combustible Liquid) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to state regulations for storage and transport requirements. Do not store or use near naked flame, or heat sources. Do not cut or weld container.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure Guidelines:**

No exposure limits have been assigned by Safe Work Australia for this product.

**Biological Limit Values:**

No biological limit allocated.

**SECTION 8 | EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)****Engineering controls:**

Use in well ventilated areas. Keep containers closed when not in use. No special engineering controls are required.

**Personal Protective equipment (PPE):**

General: When opening the container, preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, a face shield or goggles. Wash hands after use. After each day's use wash gloves, face shield or goggles and contaminated clothing.

Personal Hygiene: Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

**SECTION 9 | PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Clear straw coloured liquid.
<b>Odour:</b>	Slight petroleum like odour.
<b>Boiling point:</b>	Not known.
<b>Freezing point:</b>	Not known.
<b>Specific Gravity:</b>	0.99 ± 0.1.
<b>Solubility in Water:</b>	Emulsifies in water. Not soluble.
<b>pH:</b>	4.5 - 6.5.
<b>Flammability:</b>	Combustible liquid.
<b>Corrosive hazard:</b>	Not corrosive.
<b>Flashpoint (°C):</b>	Not data on product, but expected to be about 70°C.
<b>Flammability Limits (%):</b>	No data.
<b>Poisons Schedule:</b>	This product is a schedule 5 (S5) poison.

**SECTION 10 | STABILITY AND REACTIVITY**

**Chemical Stability:** Product stable for at least 2 years under normal conditions of use.

**Conditions to avoid:** Avoid heat sources as product is a combustible liquid.

**Incompatible materials:** Avoid strong oxidising agents.

**Hazardous Decomposition Products:** None under normal conditions. In a fire toxic and noxious gases may be released.

**Hazardous Polymerization:** Material is not known to polymerize.

**SECTION 11 | TOXICOLOGICAL INFORMATION**

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure. Irritating to the eyes and skin.

**Potential Health Effects:****ACUTE EFFECTS**

**Swallowed:** This product has low toxicity. The estimated Acute Oral LD<sub>50</sub> (rat) > 5000 mg/kg. Aspiration into the lungs from ingestion or vomiting may cause chemical pneumonitis or pulmonary oedema, from the hydrocarbon solvent.

**Eye:** This product may cause slight irritation to the eyes and slight corneal injury.

**Skin:** This brief contact is essentially non-irritating to the skin. More prolonged contact may result in irritation with a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis. The estimated LD<sub>50</sub> > 2000 mg/kg.

**Inhaled:** Inhalation of mists or sprays may produce respiratory irritation. The estimated LC<sub>50</sub> is greater than 6.2 mg/L/4 hours, (this was the highest concentration able to be produced).

**SECTION 11 TOXICOLOGICAL INFORMATION (Continued)**

**Long Term Exposure:** In animal studies, fluroxypyr meptyl has shown no evidence of oncogenic effects, no carcinogenic effect no teratogenic potential and is not mutagenic. Fluroxypyr is absorbed from the gastrointestinal tract and eliminated principally in the urine.

**SECTION 12 ECOLOGICAL INFORMATION**

**Environmental Toxicology:** No information is available for the product. The following information refers to the active ingredient, fluroxypyr meptyl. Low toxicity to upland game birds (Bobwhite quail LD<sub>50</sub> > 2000 mg/kg). Mallard duck LD<sub>50</sub> > 2,000 mg/kg. Low toxicity to fish due to the low solubility of fluroxypyr meptyl (~0.9 mg/L). *Bees:* Oral LD<sub>50</sub> > 100 mg/bee, Contact LD<sub>50</sub> > 100 mg/bee. DO NOT contaminate streams, rivers or water courses.

**Environmental Fate:** No information is available for the product. The following information refers to the active ingredient, fluroxypyr meptyl. The product is not persistent. Half-life time (t<sub>1/2</sub>): < 7 days (fluroxypyr meptyl). Degradation is primarily via: hydrolysis. Water: DT<sub>50</sub> = 1-3 days.

**SECTION 13 DISPOSAL CONSIDERATIONS****Spills and Disposal:**

**1) After intended use (disposal of container):** Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. 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 500mm in a disposal pit specifically marked and set up for this purpose clear of water ways desirable vegetation and tree roots. Empty containers and product should not be burnt. Do not cut, saw or weld empty containers, as there is the possibility that fumes inside the container maybe ignited and cause the container to explode.

**2) After spill or accident:** Wear full protective clothing and equipment including chemical resistant (PVC) gloves. Place spilled material and contaminated material into an approved recovery drum. Dispose of drummed waste and decontamination solution in accordance with the requirements of Local Authorities or State Waste Management Authorities. Do not cut or weld metal containers.

**SECTION 14 TRANSPORT INFORMATION**

**Transport:** Staroxy 200 is not classified as Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail. This product is a Schedule 5 Poison (S5) and must be stored in accordance with the relevant Health Department regulations.

**SECTION 15 REGULATORY INFORMATION**

Under the Standard for Uniform Scheduling of Drugs and Poisons (SUSDP), this product is a schedule 5 poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 61136.

This product is classified as a Hazardous Substance under the criteria of Safe Work Australia. (Xn: Harmful).

Staroxy 200 is not classified as Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail.

**Requirements concerning special training:**

Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

**SECTION 16 OTHER INFORMATION**

Issue Date: 30 April 2013. (Revised address details).

Key to abbreviations and acronyms used in this MSDS:

- ADG Code: Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).
- ASCC: Australian Safety & Compensation Council (formally known as the National Occupational Health & Safety Commission (NOHSC)).
- Bradycardia: Is a resting heart rate of under 60 beats per minute (adults).
- Carcinogen: An agent which is responsible for the formation of a cancer.
- Genotoxic: Capable of causing damage to genetic material, such as DNA.
- Hypotonia: A condition of abnormally low muscle tone.
- Mutagenic: Able to produce a mutation (a change in the genetic material of cells).
- Neurotoxicity: An adverse change in the structure or function of the nervous system.
- Oedema: Accumulation of fluid in tissues.
- PPE: Personal protective equipment.
- Teratogen: An agent capable of causing abnormalities in a developing foetus, that is causing birth defects.
- STEL: Short Term Exposure Limits
- TWA: The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.
- Safe Work Australia: Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).

References

1. "Search Hazardous Substances". Safe Work Australia HSIS website. (2013).
2. "Approved Criteria for Classifying Hazardous Substances" 3<sup>rd</sup> Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.

*This MSDS 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.*

End MSDS