

# MATERIAL SAFETY DATA SHEET



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

## SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name: eChem Chlorsulfuron 750 WG Herbicide**

**Full Product Name:** eChem Chlorsulfuron Herbicide  
**Other Names:** Chlorsulfuron, A sulfonyleurea herbicide, Group B Herbicide.  
**Use:** Sulfonyleurea Herbicide for the control of annual ryegrass and certain broadleaved weeds in winter cereal crops.  
**Company:** eChem (Australia) Pty Ltd  
**Address:** Level 4, Lantos Place, 80 Stamford Road, Indooroopilly, QLD 4068  
**ACN/ABN:** 089 133 095  
**Telephone Number:** Ph: 1300 781 649 Fax: 1300 781 650  
**Emergency Contact:** 1800 033 111

## SECTION 2 HAZARDS IDENTIFICATION

**Not classified as hazardous according to criteria of Safe Work Australia.  
Not classified as a Dangerous Good according to the ADG Code.**

## SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

### Ingredients:

<i>CHEMICAL</i>	<i>CAS NUMBER</i>	<i>PROPORTION</i>
Chlorsulfuron	67375-30-8	75% w/w
Other ingredients determined not to be hazardous		25% w/w

## SECTION 4 FIRST AID MEASURES

### FIRST AID

**Ingestion:** If swallowed do not induce vomiting. Wash mouth with water and give water to drink. If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126.

**Eye contact:** If in eyes brush granules away, and flush with water to remove any chemical. If irritation occurs and persists, obtain medical attention.

**Skin contact:** Brush granules away and remove contaminated clothing. Wash skin with soap and water. If skin irritation persists, seek medical advice.

**Inhalation:** Remove to fresh air and observe until recovered. Seek medical advice if effects persist.

**Advice to Doctor:** Treat symptomatically.

## SECTION 5 FIRE FIGHTING MEASURES

**Specific Hazard:** Product is not flammable. No risk of explosion if involved in a fire.

**Extinguishing media:** Extinguish fire using media suited to burning material. If containers are ruptured contain all runoff. If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the contamination hazard.

**SECTION 5 FIRE FIGHTING MEASURES (Continued)**

**Hazards from combustion products:** On burning will produce toxic and noxious vapours, including carbon oxides, nitrogen oxides, sulfur oxides, hydrogen chloride and phosgene.

**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. In common with many organic chemicals, this product may form flammable dust clouds in air. Evacuate personnel to a safe area.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**Emergency procedures:** Isolate and post spill area. Keep out unprotected persons and animals. Wear protective clothing and equipment to prevent skin and eye contamination. Large spills should be dyked and covered to prevent dispersal. Keep material out of streams and sewers. Vacuum, shovel or pump spilled material into an approved container and if unable to use as directed on the label, dispose of as listed in section 13.

This product is a herbicide and spills can damage crops, pastures and desirable vegetation. Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

**SECTION 7 HANDLING AND STORAGE**

**Precautions for safe Handling:** No smoking, eating or drinking should be allowed where material is used or stored. Wear protective equipment to prevent skin and eye contamination. Avoid contact with eyes and skin. DO NOT inhale spray mist. Wash hands after use.

**Conditions for safe Storage:** eChem Chlorsulfuron Herbicide is not classified as a Dangerous Good. This product is a Schedule 5 Poison (S5) and must be stored, transported and sold in accordance with the relevant Health Department regulations.

Store in the closed, original container in a well ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight. Do not re-use container for any purpose.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION****National Exposure Standards:**

No exposure standard has been assigned by Safe Work Australia to this material. However, the following Standard for dusts has been established: TWA 10 mg/m<sup>3</sup>.

**Biological Limit Values:**

No biological limit allocated.

**Engineering controls:**

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

**Personal Protective equipment (PPE):**

General: Avoid contact with eyes and skin. DO NOT inhale spray mist. Wash hands after use.

Personal Hygiene: Wash skin before eating, drinking or smoking. Shower at the end of the workday.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Off white-tan solid granules.
<b>Odour:</b>	Odourless.
<b>Boiling point:</b>	No data available.
<b>Freezing point:</b>	No data available.
<b>Bulk density:</b>	0.59.
<b>Solubility in Water:</b>	31,800 mg/L in water (pH 7).
<b>pH:</b>	No data available.
<b>Flammability:</b>	Not flammable.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES (Continued)**

**Flashpoint (°C):** not applicable - solid.  
**Flammability Limits (%):** No data available.  
**Poisons Schedule:** S5.

**SECTION 10 STABILITY AND REACTIVITY**

**Chemical Stability:** Product is considered stable for a period of at least 2 years.

**Conditions to avoid:** Avoid exposure to heat and naked flame.

**Incompatible materials:** Incompatible with strong oxidizing agents.

**Hazardous Decomposition Products:** On burning will produce toxic and noxious vapours, including carbon oxides, nitrogen oxides, sulfur oxides, hydrogen chloride and phosgene.

**Hazardous Reactions:** Does not polymerise.

**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. May irritate the eyes. Repeated or prolonged contact with the skin may be irritating.

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

**Swallowed:** Swallowing may result in nausea, vomiting and headache. The Acute Oral LD<sub>50</sub> (rat) > 5000 mg/kg (Technical Chlorsulfuron).

**Eye:** This product may be irritating to the eyes.

**Skin:** Repeated or prolonged exposure may be irritating to the skin. LD<sub>50</sub> > 2500 mg/kg (Technical Chlorsulfuron).

**Inhaled:** Inhalation may produce respiratory irritation.

**Long Term Exposure:** *Carcinogenic effects:* Rats and mice fed moderate to high doses of chlorsulfuron for 18 months to 2 years show no increased incidence of tumours. Chlorsulfuron has no evidence of carcinogenicity (causing cancer). Multiple studies show that chlorsulfuron is not a mutagen. *Fate in humans and animals:* Rats rapidly excrete chlorsulfuron in their urine and faeces. Chlorsulfuron does not bioaccumulate (build up) in mammals.

*Chronic toxicity:* Chlorsulfuron causes moderate body weight and food consumption decreases when fed to rats and mice for 18 months to 2 years. Chlorsulfuron caused no adverse health effects when fed to dogs at high doses for 6 months. However, it did cause decreases in weight gain and changes in the blood when fed to dogs in high doses for one year.

*Reproductive effects:* Chlorsulfuron causes a decrease in female fertility when fed to rats in moderate doses over three generations. It caused no birth defects when fed to rats in high doses during pregnancy. Chlorsulfuron caused an increase in the number of resorbed (undeveloped) foetuses in females fed moderate doses. This is in conflict with a second study that showed no reproductive effects or birth defects in rabbits fed high doses.

**SECTION 12 ECOLOGICAL INFORMATION**

**Persistence and degradability:** No data is available on this product. Adsorption of chlorsulfuron to clay is low while organic matter has some affinity. K value of 0.69 on a Flanagan silt loam. Rate of leaching is correlated with net movement of soil moisture with less leaching if pH is less than 6.0. Initial deactivation of the molecule is through hydrolysis followed by complete metabolism to low molecular weight compounds through normal soil microbial processes. In the field photodecomposition and volatilization play minor roles in its disappearance.

**SECTION 12 ECOLOGICAL INFORMATION (Continued)**

Hydrolysis into nonherbicidal compounds is the major form of degradation and its rate is influenced by soil temperature, pH and levels of oxygen and moisture. Under growing season conditions the half-life is 4-6 weeks. Soil temperature influences length of half-life with shorter persistence at higher temperature. Low pH accelerates hydrolysis while soil texture does not appear to be a major factor in rate of degradation.

**Environmental Toxicology:** Generally recognised as having low toxicity to wildlife and fish: Oral LD<sub>50</sub> >5000 mg/kg for quail and duck, oral dietary LC<sub>50</sub> of >5000 ppm for quail and duck, LC<sub>50</sub> (96 hr) >250 ppm for trout and bluegill. Ninety-six hour LC<sub>50</sub> = >300 ppm (*fathead minnow*), >50 ppm (catfish) (technical material) (21h). Forty-eight hour LC<sub>50</sub> = 370 ppm (*Daphnia magna*) (technical material) (21h).

**Mobility:** Chlorsulfuron is moderately persistent and highly mobile and has potential to enter surface waters from runoff. The very low application rate and microbial breakdown suggest that chlorsulfuron has little potential to enter ground water.

**SECTION 13 DISPOSAL CONSIDERATIONS****Spills and Disposal:****1) After intended use - containers:**

DO NOT dispose of undiluted chemicals on site. 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.

**2) After spill or accident**

Dispose of waste in accordance with the requirements of Local Authorities or State Waste Management Authorities. In rural areas contact ChemClear <http://www.chemclear.com.au> for help with collection of unwanted rural chemicals.

**SECTION 14 TRANSPORT INFORMATION**

**Transport:** eChem Chlorsulfuron Herbicide is not classified as a Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail, the International Maritime Dangerous Goods (IMDG) Code or the International Air Transport Association (IATA).

This product is a Schedule 5 Poison (S5) and must be stored, transported and sold in accordance with the relevant Health Department regulations.

**SECTION 15 REGULATORY INFORMATION**

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

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 60682.

This product is not classified as a Hazardous Substance under the criteria of Safe Work Australia.

eChem Chlorsulfuron Herbicide is not classified as Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail, International Maritime Dangerous Goods (IMDG) Code or the International Air Transport Association (IATA).

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: 29 April 2013. Valid for 5 years. (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).

**SECTION 16 OTHER INFORMATION (Continued)**

ASCC:	Australian Safety & Compensation Council (formally known as the National Occupational Health & Safety Commission (NOHSC)).
Carcinogen:	An agent which is responsible for the formation of a cancer.
Genotoxic:	Capable of causing damage to genetic material, such as DNA.
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.
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