

4FARMERS CHLORSULFURON 750 WATER DISPERSIBLE GRANULE CEREAL HERBICIDE

(Chemwatch name: 4FARMERS CHLORSULFURON 750 WATER DISPERSIBLE
GRANULE)

Chemwatch Independent Material Safety Data Sheet

Issue Date: 21-Jul-2009

C9317EC

CHEMWATCH 4344463

Version No:2.0

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

4FARMERS CHLORSULFURON 750 WATER DISPERSIBLE GRANULE CEREAL
HERBICIDE

SYNONYMS

"4Farmers CHLORSULFURON 750 Water Dispersible Granule Cereal Herbicide"

PRODUCT USE

Selective herbicide for the control of Annual (Wimmera) Ryegrass and certain broadleaved
weeds in winter cereal crops.

SUPPLIER

Company: 4Farmers

Address:

1/70 McDowell Street

Welshpool, 6106

AUS

Telephone: +61 8 9356 3445

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Email: admin@4farmers.com.au

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to the Criteria of
NOHSC, and the ADG Code.



POISONS SCHEDULE

S5

RISK

- Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.
- Toxic to soil organisms.
- Ingestion may produce health damage*.

SAFETY

- Avoid exposure - obtain special instructions before use.
- To clean the floor and all objects contaminated by this material use water and detergent.
- This material and its container must be disposed of in a safe way.

- Cumulative effects may result following exposure*.
 - May produce discomfort of the eyes*.
 - Limited evidence of a carcinogenic effect*.
 - May affect fertility*.
 - May possibly be harmful to the foetus/embryo*.
- * (limited evidence).

- In case of contact with eyes rinse with plenty of water and contact Doctor or Poisons Information Centre.
- Use appropriate container to avoid environmental contamination.
- Avoid release to the environment. Refer to special instructions/Safety data sheets.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
chlorsulfuron	64902-72-3	75
dispersing/wetting agents		<10
inerts		<10
calcium carbonate	471-34-1	>10

Section 4 - FIRST AID MEASURES

SWALLOWED

- - If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

EYE

- If this product comes in contact with the eyes:
 - Wash out immediately with fresh running water.
 - Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

SKIN

- If skin or hair contact occurs:
 - Flush skin and hair with running water (and soap if available).
 - Seek medical attention in event of irritation.

INHALED

- - If dust is inhaled, remove from contaminated area.
- Encourage patient to blow nose to ensure clear passage of breathing.

NOTES TO PHYSICIAN

- Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- - There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

FIRE FIGHTING

- - Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves for fire only.

FIRE/EXPLOSION HAZARD

- - Combustible solid which burns but propagates flame with difficulty.
 - Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust (420 micron or less) may burn rapidly and fiercely if ignited.; once initiated larger particles up to 1400 microns diameter will contribute to the propagation of an explosion.
- Combustion products include: carbon monoxide (CO), carbon dioxide (CO₂), hydrogen chloride, phosgene, nitrogen oxides (NO_x), sulfur oxides (SO_x), other pyrolysis products typical of burning organic material.
- May emit poisonous fumes.
May emit corrosive fumes.

FIRE INCOMPATIBILITY

- - Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

HAZCHEM: None

PERSONAL PROTECTION

Glasses:
Chemical goggles.
Gloves:
Respirator:
Particulate

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- Environmental hazard - contain spillage.
- Remove all ignition sources.
- Clean up all spills immediately.

MAJOR SPILLS

- Environmental hazard - contain spillage.
- Moderate hazard.
- CAUTION: Advise personnel in area.
 - Alert Emergency Services and tell them location and nature of hazard.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- - Avoid all personal contact, including inhalation.
 - Wear protective clothing when risk of exposure occurs.
- Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.

SUITABLE CONTAINER

- - Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

- - Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

- - Store in original containers.
- Keep containers securely sealed.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA mg/m ³	Notes
Australia Exposure Standards	calcium carbonate (Calcium carbonate (a))	10	(see Chapter 14)

The following materials had no OELs on our records

- chlorsulfuron: CAS:64902-72-3

PERSONAL PROTECTION

RESPIRATOR

Particulate

EYE

- - Safety glasses with side shields.
- Chemical goggles.

HANDS/FEET

- Suitability and durability of glove type is dependent on usage. Factors such as:
 - frequency and duration of contact,
 - chemical resistance of glove material,Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.
 - polychloroprene
 - nitrile rubber.

OTHER

- - Overalls.
- P.V.C. apron.

- - Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
 - The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).

ENGINEERING CONTROLS

- - Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.
 - If in spite of local exhaust an adverse concentration of the substance in air could occur, respiratory protection should be considered.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Off-white to cream powder with mild chemical odour; disperses in water.

PHYSICAL PROPERTIES

Does not mix with water.

Molecular Weight: Not Applicable
Melting Range (°C): Not Available
Solubility in water (g/L): Immiscible
pH (1% solution): Not Available
Volatile Component (%vol): Not Available
Relative Vapour Density (air=1): Not Available
Lower Explosive Limit (%): Not Applicable
Autoignition Temp (°C): Not Applicable
State: Divided Solid

Boiling Range (°C): Not Applicable
Specific Gravity (water=1): Not Available
pH (as supplied): Not Available
Vapour Pressure (kPa): Not Available
Evaporation Rate: Not Available
Flash Point (°C): Not Applicable
Upper Explosive Limit (%): Not Applicable
Decomposition Temp (°C): Not Available
Viscosity: Not Available

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- - Presence of incompatible materials.
 - Product is considered stable.
- For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

- Ingestion may produce health damage*.
- May produce discomfort of the eyes*.
- * (limited evidence).

CHRONIC HEALTH EFFECTS

- Limited evidence of a carcinogenic effect*.
- May affect fertility*.
- May possibly be harmful to the foetus/ embryo*.
- Cumulative effects may result following exposure*.
- * (limited evidence).

TOXICITY AND IRRITATION

- unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

■ The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis.

CHLORSULFURON:

- unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

Oral (Rat, adult male) LD50: 5545 mg/kg
Inhalation (Rat) LC50: >5900 mg/m³/4h

IRRITATION

- The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

CALCIUM CARBONATE:

- unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

Oral (Rat) LD50: 6450 mg/kg

IRRITATION

Skin (rabbit): 500 mg/24h-Moderate
Eye (rabbit): 0.75 mg/24h - SEVERE

- The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling the epidermis. No evidence of carcinogenic properties. No evidence of mutagenic or teratogenic effects.

Section 12 - ECOLOGICAL INFORMATION

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Toxic to soil organisms.

Avoid release to the environment.

Refer to special instructions/ safety data sheets.

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
4Farmers CHLORSULFURON 750 Water Dispersible Granule		No data		
chlorsulfuron		No data		
calcium carbonate		No data		

Section 13 - DISPOSAL CONSIDERATIONS

- Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.
 - DO NOT allow wash water from cleaning or process equipment to enter drains.
 - It may be necessary to collect all wash water for treatment before disposal.
 - Recycle wherever possible.
 - Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

Section 14 - TRANSPORTATION INFORMATION

HAZCHEM: None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: ADG7, UN, IATA, IMDG

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE: S5

REGULATIONS

Regulations for ingredients

chlorsulfuron (CAS: 64902-72-3) is found on the following regulatory lists;

"Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - pesticides)", "Australia - Australian Capital Territory Environment Protection Regulation Pollutants entering waterways - Domestic water quality", "Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)"

calcium carbonate (CAS: 471-34-1,13397-26-7,15634-14-7,1317-65-3) is found on the following regulatory lists;

"Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "Australia Therapeutic Goods Administration (TGA) Substances that may be used as active ingredients in Listed medicines", "CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP", "IMO IBC Code Chapter 17: Summary of minimum requirements", "International Council of Chemical Associations (ICCA) - High Production Volume List", "OECD Representative List of High Production Volume (HPV) Chemicals"

No data for 4Farmers CHLORSULFURON 750 Water Dispersible Granule (CW: 4344463)

Section 16 - OTHER INFORMATION

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
calcium carbonate	471-34-1, 13397-26-7, 15634-14-7, 1317-65-3

■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:
www.chemwatch.net/references.

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

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This is the end of the MSDS.