

Safety Data Sheet according to WHS Regulations

Print date: 19.04.2023

Revision date: 19.04.2023

1 Identification

Product Name: eChem Clethodim 360 EC Herbicide

Other Means of Identification: Mixture

APVMA Approval Number: 93114

Recommended Use of the Chemical and Restriction on Use: Agricultural herbicide

Details of Manufacturer or Importer:

eChem Australia Pty Ltd
Level 4, Lantos Place
80 Stamford Road
Indooroopilly QLD 4068
Australia

Phone Number: 1300 781 649 (office hours)

Emergency telephone number: 1800 033 111 (any time) or National Poisons Information Centre: 13 11 26

2 Hazard(s) Identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition), IATA and IMDG/IMSBC.



Health hazard

Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.



Skin Sensitisation 1 H317 May cause an allergic skin reaction.

Flammable Liquids 4 H227 Combustible liquid.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Signal Word Danger

Hazard Statements

H227 Combustible liquid.

H317 May cause an allergic skin reaction.

H304 May be fatal if swallowed and enters airways.

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P331 Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of water.

P362+P364 Take off contaminated clothing and wash it before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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P370+P378 In case of fire: Use CO₂, powder or water spray to extinguish.

P403 Store in well-ventilated place.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures**Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

CAS: 64742-94-5	Solvent naphtha (petroleum), heavy arom. ⚠ Aspiration Hazard 1, H304	50-60%
CAS: 99129-21-2	Clethodim ⚠ Acute Toxicity (Oral) 4, H302; Skin Sensitisation 1, H317; Aquatic Chronic 3, H412	30-40%

4 First Aid Measures

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if irritation develops and persists.

Eye Contact:

In case of eye contact, rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Seek medical attention if irritation persists.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation.

Skin Contact: May cause skin irritation. May cause an allergic skin reaction.

Eye Contact: May cause eye irritation.

Ingestion: May be fatal if swallowed and enters airways. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.

5 Fire Fighting Measures

Suitable Extinguishing Media:

Foam, dry chemical or carbon dioxide. If water spray is used, contain all runoff.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, oxides of nitrogen, other nitrogen compounds, hydrogen cyanide and smoke.

Product is combustible. It will burn in a larger fire.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Prevent run-off from fire fighting entering drains or water courses.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

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6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses. Inform respective authorities in case of seepage into water course or sewage system.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal. Use only non-sparking tools.

7 Handling and Storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep in original container, tightly closed when not in use. Protect from freezing. Protect from direct sunlight, heat, sparks, open flames and other sources of ignition. Keep away from strong oxidising agents (e.g. chlorates, nitrates or peroxides), acids and bases. This product is unstable at extremely low or high pH levels.

8 Exposure Controls and Personal Protection

Exposure Standards:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Engineering Controls: Ensure adequate ventilation of the working area.

Respiratory Protection:

Use an approved mixed type organic vapour / particulate respirator (types A and P) under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Chemical-resistant gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered. Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Safety glasses with top and side shields or goggles. See Australian/New Zealand Standards AS/NZS 1336 and 1337 for more information.

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9 Physical and Chemical Properties

Appearance:

Form:	Liquid
Colour:	Brown
Odour:	Mild
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	>61 °C
Flammability (solid, gas):	No information available
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	No information available
Relative Density:	0.98
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Forms an emulsion in water
Partition Coefficient (n-octanol/water):	No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions: No dangerous reactions known under conditions of normal use.

Chemical Stability: Stable at ambient temperature and under normal conditions of storage and use.

Conditions to Avoid: Freezing. Direct sunlight, heat, sparks, open flames and other sources of ignition.

Incompatible Materials:

Strong oxidising agents (e.g. chlorates, nitrates or peroxides), acids and bases. This product is unstable at extremely low or high pH levels.

Hazardous Decomposition Products:

Oxides of carbon, oxides of nitrogen, other nitrogen compounds, hydrogen cyanide and smoke.

11 Toxicological Information

Toxicity:**LD50/LC50 Values:****CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.**

Oral	LD50	5,000 mg/kg (Rattus norvegicus (rat))
	LD50	2,000 mg/kg (Oryctolagus cuniculus (rabbit))

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Oral	LD50	1,133 mg/kg (Rattus norvegicus (rat))
	LD50	>5,000 mg/kg (Oryctolagus cuniculus (rabbit))
Dermal	LD50	4,167 mg/kg (Oryctolagus cuniculus (rabbit))
Inhalation	LC50/4 h	<3.25 mg/l (Rattus norvegicus (rat))

Acute Health Effects

Inhalation: May cause respiratory irritation.

Skin: May cause skin irritation. May cause an allergic skin reaction.

Eye: May cause eye irritation.

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Ingestion:

May be fatal if swallowed and enters airways. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

Serious Eye Damage / Irritation: Based on classification principles, the classification criteria are not met.

Respiratory or Skin Sensitisation: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: Based on classification principles, the classification criteria are not met.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: May be fatal if swallowed and enters airways.

Chronic Health Effects:

Prolonged eye contact may cause damage. Repeated and prolonged occupational overexposure to solvents may cause permanent brain and nervous system damage. Symptoms include fatigue, lack of concentration, anxiety, depression, mood swings and memory loss.

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for clethodim for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 1 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species.

(Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2023).

12 Ecological Information

Ecotoxicity: This product has low toxicity to birds, honey bees and earthworms.

Aquatic toxicity:

Harmful to aquatic life with long lasting effects.

CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.

EC50/48 h	12 mg/l (Daphnia magna (water flea))
EC50/72 h	2.5 mg/l (Skeletonema costatum (diatom))
LC50/96 h	45 mg/l (Pimephales promelas (fathead minnow))

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LC50/96 h	120 mg/l (Lepomis macrochirus (bluegill))
	67 mg/l (Oncorhynchus mykiss (rainbow trout))
LC50/48 h	120 mg/l (Daphnia magna (water flea))
EC50/120hr	57.8 mg/l (Algae)

Persistence and Degradability:

Clethodim has low persistence in soils, with a half-life of 3 days. However, clethodim is highly persistent in water, with a half-life of 128 days.

Bioaccumulative Potential: No data available on finished product.

Mobility in Soil: No data available on finished product.

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Other adverse effects: No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number Not regulated**Proper Shipping Name** Not regulated**Dangerous Goods Class** Not regulated**Packing Group:** Not regulated

15 Regulatory Information

Australian Inventory of Industrial Chemicals:

All components are on the inventory, or in compliance with the inventory.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 5

Australian Pesticides and Veterinary Medicines Authority:

This product is registered with the Australian Pesticides and Veterinary Medicines Authority. APVMA approval number 93114.

16 Other Information

Date of Preparation or Last Revision: 19.04.2023**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au**Abbreviations and acronyms:**

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Flammable Liquids 4: Flammable liquids – Category 4

Acute Toxicity (Oral) 4: Acute toxicity – Category 4

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

Aspiration Hazard 1: Aspiration hazard – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term (Chronic). Category 3

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020”.

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