



Safety Data Sheet

SANONDA
(AUSTRALIA) PTY

Infosafe Issue Date : August 2015 ISSUED by SANONDA

Product Name **Sanonda Herbicide Clethodim 240EC**

Classified as hazardous

1. Identification

GHS Product Identifier Sanonda Herbicide Clethodim 240EC

Product Code 7113

Product Type Group A Herbicide

Company Name Sanonda (Australia) Pty Ltd (ABN 23 059 813 973)

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Recommended use of the chemical and restrictions on use For the control of certain grass weeds in beetroot, cabbage, canola, celery, chickpeas, cotton, faba beans, field peas, forestry, lentils, lettuce, lupins, mung beans, non-bearing fruit trees, onions, ornamentals, peanuts, potatoes and soybeans.

Other Information This Safety Data Sheet describes the properties of the concentrated product. The physical properties and the assessments may not apply to the properties of the product once it has been diluted for application.

2. Hazard Identification

GHS classification of the substance/mixture CA2 Carcinogenicity: Category 2
AH1 Aspiration Hazard: Category 1
SE-3NARC STOT Single Exposure Category 3 (narcotic)
SC-2 Skin Corrosion/Irritation: Category 2
ED2A Eye Damage/Irritation: Category 2A
SS-1 Sensitization - Skin: Category 1

Signal Word (s) DANGER

Hazard Statement (s) H351 Suspected of causing cancer.
H304 May be fatal if swallowed and enters airways.
AUH066 Repeated exposure may cause skin dryness or cracking.
H336 May cause drowsiness or dizziness.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.

General Precautionary Statement (s) P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.

Pictogram (s) Health hazard, Exclamation mark



Precautionary statement – Prevention P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing vapours and spray.
P271 Use only outdoors or in a well-ventilated area.
P264 Wash hands and exposed skin thoroughly after handling.
P280 Wear protective gloves, clothing, eye and face protection.
P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement – Response P308+P313 IF exposed or concerned: Get medical advice/attention.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 Do NOT induce vomiting.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.



Safety Data Sheet

SANONDA
(AUSTRALIA) PTY

Page: 2 of 5

Infosafe Issue Date : August 2015 ISSUED by SANONDA

Product Name **Sanonda Herbicide Clethodim 240EC**
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Other Information

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+Pa313 If eye irritation persists: Get medical advice/attention.
Poisons Schedule S5

3. Composition/information on ingredients

Chemical Characterization	Liquid		
Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Clethodim	99129-21-2	240 g/L
	Liquid Hydrocarbons	64742-94-5	606 g/L
	Other ingredients (considered non-hazardous)		Balance

4. First-aid measures

Inhalation Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.

Ingestion Rinse mouth and then drink plenty of water.
Do not give anything by mouth to a semi-conscious or unconscious person. If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.

Skin Wash affected areas thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.

Eye contact If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.
Seek medical advice.

First Aid Facilities If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.

Advice to Doctor Treat symptomatically.
If vomiting occurs, solvent present may cause pulmonary pneumonitis.

5. Fire-fighting measures

Suitable extinguishing media Water fog, foam, carbon dioxide or dry chemical.

Hazards from Combustion Products May emit toxic fumes of hydrogen chloride or phosgene if involved in fires or exposed to extreme heat.

Special Protective Equipment for fire fighters Breathable air apparatus should be worn when fighting a fire in which this product is involved.

Other Information STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. Accidental release measures

Spills & Disposal Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite).
Collect spilled material and waste in sealable open-top type containers for disposal.
On-site disposal of concentrate is not acceptable.

Clean-up Methods - Large Spillages Place damaged containers in recovery bins (if available) and return to manufacturer.
If large liquid spills occur, attempt to recover as much spilt material from sumps and banded areas, as possible, before absorbing remaining material into vermiculite or other absorbent.

Environmental Precautions This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

7. Handling and storage



Safety Data Sheet

SANONDA
(AUSTRALIA) PTY

Page: 3 of 5

Infosafe Issue Date : August 2015 ISSUED by SANONDA

Product Name **Sanonda Herbicide Clethodim 240EC**
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Conditions for safe storage, including any incompatibilities Store in the closed, original container in a dry, well ventilated area out of direct sunlight.
Protect from frosts.

Tank Cleaning See label for detailed information on cleaning of spray equipment.

Other Information Always read the label and any attached leaflet before use.

8. Exposure controls/personal protection

Occupational exposure limit values The manufacturer of the solvent has recommended an occupational exposure limit of 100 mg/m³; 17ppm TWA, as total hydrocarbon.

Appropriate engineering controls Handle in well ventilated areas, generally natural ventilation is adequate.

Personal Protective Equipment When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles.

Hygiene Measures After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

After each day's use, wash contaminated clothing and safety equipment.

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.

9. Physical and chemical properties

Form Liquid

Appearance Amber coloured liquid

Odour Solvent odour

Solubility in Water Emulsifiable in water.

Specific Gravity 0.95 g/mL at 20 °C

Vapour Pressure Not available

Partition Coefficient: n-octanol/water Clethodim: 0.49 @ pH=9; 40 @ pH=7; >3,000 @ pH=5.

Flash Point About 65°C

Flammability Combustible liquid C1.

Other Information Not available

10. Stability and reactivity

Chemical Stability Stable under normal conditions.

Possibility of hazardous reactions Keep away from strong oxidising agents.

Hazardous Polymerization Hazardous polymerisation is not possible.

11. Toxicological Information

Acute Toxicity - Oral LD50 (rat): 1630 mg/kg (male), 1360 mg/kg (female)

Acute Toxicity - Dermal LD50 (rat): > 5000 mg/kg, practically non-dermal toxic.

Acute Toxicity - Inhalation LC50 (rat): > 4.4 mg/L (4 hours)

Ingestion Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury.

If aspirated into the lung, e.g. from vomiting, the presence of solvent may result in chemical pneumonitis or other lung damage.

Inhalation High vapour concentrations of the solvent while handling the concentrate are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, and may have other central nervous system effects.



Safety Data Sheet

SANONDA
(AUSTRALIA) PTY

Page: 4 of 5

Infosafe Issue Date : August 2015 ISSUED by SANONDA

Product Name **Sanonda Herbicide Clethodim 240EC**
Classified as hazardous

Skin Will irritate the skin.
Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.

Eye Will irritate the eyes.

Skin Sensitisation This product is not a skin sensitiser.

Carcinogenicity An impurity present in the solvent has been found to cause tumors in laboratory studies. The active ingredient(s), clethodim is not considered carcinogenic.

Reproductive Toxicity No such effects have been observed in the absence of maternal toxicity.

Chronic Effects Chronic exposure can cause damage to the liver.

Serious eye damage/irritation The product is an eye irritant.

Mutagenicity The weight of evidence indicates that clethodim does present a mutagenic risk.

Skin corrosion/irritation The product is a skin irritant.

Other 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 NOEL 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: Aust Govt Dept. of Health, Office of Chemical Safety, 'ADI List', June 2014).

12. Ecological information

Persistence and degradability Average field half life of clethodim is 1-3 days.

Other Precautions Do not spray in high winds.
Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Spray drift can cause damage, read the label for more information.

Environmental Protection

Acute Toxicity - Fish The following is data for the active ingredient, clethodim.
Not toxic to fish. LC50 (96 hr) for rainbow trout is 67 mg/l.
EC50 (48hr) for daphnia is 120 mg/l for clethodim.

Acute Toxicity - Daphnia EC50 (48hr) for daphnia is 120 mg/l for clethodim.

Acute Toxicity - Algae EC50 (120hr) for algae is 57.8 mg/l for clethodim.

Acute Toxicity - Other Organisms Birds: Not toxic to birds. LD50 for bobwhite quail is >2000 mg/kg
Bees: Not toxic to bees. LD50 >100 µg/bee.

13. Disposal considerations

Product Disposal On site disposal of the concentrated product is not acceptable.
Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).

Container Disposal Do not use this container for any other purpose.
Triple or preferably pressure rinse containers before disposal. Add rinsings to the spray tank.
If recycling, replace cap and return clean containers to recycler or designated collection point.
If not recycling, puncture or shred and bury containers in 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 waterways, desirable vegetation and tree roots.
Empty containers and product should not be burnt.
drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program.



Safety Data Sheet

SANONDA
(AUSTRALIA) PTY

Page: 5 of 5

Infosafe

Issue Date : August 2015

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Classified as hazardous

Returnable containers: empty contents fully into application equipment.
Replace cap, close all valves and return to the point of supply for refill or storage.

14. Transport information

Storage and Transport Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. Regulatory information

Poisons Schedule S5

Packaging & Labelling CAUTION
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Other Information This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 66433.

16. Other Information

Date of preparation or last revision of SDS Revised 28/08/2015
This SDS replaces document dated September 2011.

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Revisions Highlighted The SDS was reviewed to include GHS requirements.
See information in Section 2 - Hazards Identification and Section 11 - Toxicological Information.
...End Of MSDS...

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