

DECANOL EC

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: DECANOL EC
Other identifier: n-Decanol EC
Recommended use: Plant Growth Regulator
Restrictions on use: Agriculture

Company: Universal Crop Protection (Pty) Ltd.
Co. Reg. No.: 1983/008184/07
 PO Box 801,
 Kempton Park, 1620, South Africa

Telephone: (011) 396 2233

Fax: (011) 396 4666

Website: www.villacrop.co.za

Emergency telephone numbers:

24 Hr Transport / Spill emergency no:
 (Hazcall24) +27 86 044 4411

(Client: Villa Crop Protection)
 Griffon Poison Information Centre +27 82 446 8946

(Client: Villa Crop Protection)

Poisoning Emergency telephone numbers:

Griffon Poison Information Centre +27 82 446 8946

Poisons Information Centre +27 861 555 777

2. HAZARDS IDENTIFICATION

UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008

Hazard classes	Hazard categories	H-statements
Health		
Dermal	Acute Toxicity 5	H313
Eye	Eye irritation 2	H319
Environment		
Aquatic chronic	Aquatic Chronic 3	H412

The most important adverse effects:

Physicochemical effects: None known

Human health effects:

Causes serious eye irritation. (Eye Irritation 2)

Label elements:



Signal word: Warning

Hazard statements:

H313: May be harmful in contact with skin.

H319: Causes serious eye irritation.

H412: Harmful to aquatic life with long lasting effects.

Precautionary statements:

P264: Wash skin and eyes thoroughly after handling.

P273: Avoid release to the environment.

P280: Wear impervious rubber gloves and chemical safety goggles.

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

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

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

P337+P313: If eye irritation persists: Get medical attention.

P391: Collect spillage.

P501: Dispose of contents/container in accordance with local regulations.

Other hazards:

None known.

Toxicity:

Classification according to GHS: Category 5

Classification according to GPIC: Unclassified

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Chemical name	CAS	Conc. (m/v%)	Classification 1272/2008	EC
n-Decanol	112-30-1	69%	Eye Irritation 2 (H319) Aquatic Chronic 3 (H412)	3

4. FIRST AID MEASURES

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure. Immediately consult a doctor.

Inhalation: Remove person from contaminated area to fresh air and assist breathing as needed. Keep affected person warm and at rest. Seek medical attention if irritation occurs or person feels unwell after inhalation.

Skin: Remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention if irritation persists. Persons who become sensitized may require specialized medical management with anti-inflammatory agents.

Eyes: Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention if irritation persists or person feels unwell.

Ingestion: Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

Anticipated acute effects: Causes serious eye irritation.

Anticipated delayed effects: None known.

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Most important symptoms / effects: None known.

Advice to physician: Treat symptomatically and supportively. Ingestion may cause gastro intestinal disturbances with nausea, vomiting, diarrhea, and the odour of alcohol in the excreta. No specific antidote known.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use carbon dioxide or dry chemical for small fires and water fog or foam for large fires.

Unsuitable Extinguishing Media: High volume water jet. Use a water jet only to cool heated containers.

Specific hazards: When heated to decomposition it emits toxic fumes of carbon oxides.

Special fire-fighting procedures: Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Remain upwind of fire. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal. Avoid pollution of waterways by run-off from the site.

Personal protective equipment: Wear NIOSH / MSHA approved self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with skin and eyes. Ventilate area of spill or leak, especially in contained areas.

Protective equipment: Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

Emergency procedures: Alert firefighting personnel, evacuate unprotected personnel and animals.

Environmental Precautions: Prevent spilled product from entering sewers, waterways or ground water. This product is classified as harmful to aquatic organisms and will cause long-term adverse effects in the aquatic environment. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water / Environmental Affairs.

Methods and Materials for Containment: Contain spilled product by diking area with sand or earth.

Methods and Materials for Clean-up: Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate material. Vacuum, scoop, or sweep up material and place the material into a

clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spilled material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal considerations.

7. HANDLING AND STORAGE

Handling:

Precautions for safe handling: May be harmful in contact with skin. Avoid contact with skin and eyes. Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination. In the case of contact with the product refer to First Aid Measures – Section 4.

General occupational hygiene: Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Remove clothing immediately if the insecticide gets inside. Worker should shower at the end of each workday using a non-abrasive soap and put on clean clothing. Launder all clothing before it is re-used.

Storage:

Conditions for safe storage: Keep under lock and key and out of reach of unauthorised persons, children and animals. Store in its original, labelled container, tightly closed in an isolated, dry, cool and well-ventilated area. Do not store near heat, open flame, sources of ignition or hot surfaces and avoid excess heat. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers. Local regulations should be complied with.

Incompatible substances and mixtures: Refer to product label.

Packaging material: Fluorinated plastic containers.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration

No occupational exposure limits have been determined for the significant ingredients in this product.

Engineering Controls:

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations

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below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations.

Personal Protective Equipment:

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection. Adequate ventilation; protective overalls, laundered daily. Extreme cleanliness of personnel by bathing is necessary. The worker should wash daily at the end of each work shift. Workers whose clothing may have become contaminated should change into uncontaminated clothing before leaving the work premises.

Respiratory Protection: For most well-ventilated conditions, no respiratory protection should be needed

Hand Protection: The use of chemically protective (impervious) gloves is recommended to prevent against skin contact.

Eye Protection: The use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses should not be worn when working with this chemical.

Skin and Body Protection: Employees must wear appropriate protective (impervious) clothing, (rubber) boots, hat and equipment to prevent repeated or prolonged skin contact with this substance. Do not wear leather clothing.

Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear to amber liquid, emusifiable concentrate.

Odour: Sweet fatty alcohol odour.

Odour threshold: Not available.

pH (1% aqueous dilution): Neutral.

Melting point: 7 °C.

Freezing Point: Not available

Boiling Point: > 226.66 °C.

Flash Point: > 94 °C.

Flammability: Not flammable.

Upper / lower explosion limits: Not available.

Vapour Pressure (mm Hg): Not available.

Relative Vapour Density: 4.5.

Density / Relative density: 0.87 g/ml @ 20 °C.

Solubility: Emulsifies in water.

n-octanol / water partition coefficient: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: Not available.

10. STABILITY AND REACTIVITY

Chemical stability: Stable for up to 2 years when stored in a dry, cool covered warehouse in original, well-labelled containers. Store at low temperature conditions, below 50°C, preferably below 30 °C and not for prolonged periods in direct sunlight.

Reactivity: None known.

Possibility of hazardous reactions: Unlikely to occur.

Conditions to avoid: Extreme heat or exposure to flames.

Incompatible materials: Strong oxidizers. Avoid extreme temperatures.

Hazardous decomposition products: None. No hazardous polymerization will occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Calculated according to GHS

Oral LD₅₀ (24h) > 6300 mg/kg

Dermal LD₅₀ > 4500 mg/kg (rabbit)

Skin Irritation: Not known to cause skin irritation.

Eye Irritation: Cause serious eye irritation.

Skin Sensitization: Not a skin sensitizer.

Respiratory Sensitization: Not calculated.

Reproductive cell mutagenicity: Not calculated.

Carcinogenicity: Not calculated.

Reproductive toxicity: Not calculated.

Specific target organ toxicity – single exposure: Not calculated.

Specific target organ toxicity – repeated exposure: Not calculated.

Aspiration hazard: Not calculated.

Chronic Effects: Not calculated.

POTENTIAL ADVERSE EFFECTS:

Inhalation: Not available.

Ingestion: Not available.

Other information: Not available.

12. ECOLOGICAL INFORMATION

This product is harmful to aquatic life with long lasting effects.

ECOTOXICITY DATA:

Active ingredient: *N-decanol*

Daphnia:

EC₅₀ (48 h) 8.25 mg/l

Algae:

EC₅₀ (72 h) *Selenastrum* 1582 mg/l

Birds:

Acute oral LD₅₀ Mallard ducks >4640 mg/kg

Dietary LD₅₀ (8d) Mallard ducks >10 000 mg/kg diet

Bobwhite quail

ENVIRONMENTAL EFFECTS

Based on information for the active ingredient

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Plants: Not determined.
Persistence and degradability: Not determined.
Bio-accumulative potential: Not determined.
Mobility in soil: Not determined.
Other adverse effects: Not determined.

Special / Environmental Precautions: Wedge drums tightly to avoid movement.
Transport in bulk: Refer to MARPOL 73/78, Annex II and the IBC code.

13. DISPOSAL CONSIDERATIONS

Waste: Open dumping or burning of this growth regulator is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

Container: Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed. Combustible containers should be disposed of in pesticide incinerators. Metal containers must be crushed and transported to a facility for disposal or burial in a designated landfill.

TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

15. REGULATORY INFORMATION

Safet, health and environmental regulations / legislation for the mixture:

OHSA 1993 Regulations for Hazardous Chemical Substances.

Relevant information regarding restrictions: None.

EU regulation: Regulation EC1272/2008 (EU-GHS/CLP)

Other national regulations: None.

Chemical Safety Assessment carried out? No

16. OTHER INFORMATION

Packaging: Packed in 5, 20, 100 and 200 litres fluorinated plastic containers labelled according to South African regulations and guidelines.

Other hazard statements, abbreviations and explanations:

IATA: International Air Transport Association.

IBC: International Bulk Chemical.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Dangerous Goods

IMO: International Maritime Organization.

LD₅₀ value: The median lethal dose or the amount of a toxic agent that is sufficient to kill 50 percent of a population within a certain period of time.

OEL/RL: Occupational exposure limit-recommended limit.

TWA: Time-weighted average – The average exposure over a specified period, usually a nominal eight hours.

ST/STEL: Short-term exposure limits.

Disclaimer: The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

14. TRANSPORT INFORMATION

UN Number: 3082

Road Transport ADR / ORD:

Class: 9
 Packaging group: III
 UN Proper Shipping Name: Environmentally hazardous substance, liquid, N.O.S. (N-decanol 690 g/l)

Maritime Transport IMDG / IMO:

Class: 9
 Packaging group: III
 UN Proper Shipping Name: Environmentally hazardous substance, liquid, N.O.S. (N-decanol 690 g/l)

Marine pollutant (Y/N): Yes

Air Transport IATA / ICAO:

Class: 9
 Packaging group: III
 UN Proper Shipping Name: Environmentally hazardous substance, liquid, N.O.S. (N-decanol 690 g/l)

END OF DOCUMENT

Compiled: May 2020
Reviewed: June 2023
Revision no.: (2)
Next revision date: June 2028

For detailed information on revisions, contact the Registration holder.