

## UNIVERSAL DECANOL EC

## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE

**Product Name:** **DECANOL EC**  
 Growth Regulator  
**UN No.:** **3082**  
**Supplier:** **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](http://www.villacrop.co.za)

#### Emergency telephone numbers:

#### 24 Hr Transport / Spill emergency no:

EnviroSure. +27 31 205 4918  
 (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

#### Villa Crop Protection Emergency number:

**National Safety, Health and Environmental Manager:**  
 +27 63 698 0668

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

**Product Name:** DECANOL EC  
**Common Names:** n-decanol (C<sub>10</sub>)  
**Chemical Names:** decan-1-ol (IUPAC)  
**CAS No.:** 112-30-1  
**Chemical family:** Fatty alcohol, aliphatic  
**Chemical formula** C<sub>10</sub>H<sub>22</sub>O (Mol. wt.: 158.3)  
**Use:** Plant growth regulator for the control of tobacco suckers.  
**Formulation:** n-decanol: 690 g/l.  
 Emulsifiable Concentrate  
**UN No.:** 3082  
**Risk-Phrases** R 36/37/38

### 3. HAZARD IDENTIFICATION

#### Toxicity class: III.

Environmentally Hazardous Substance, Liquid, N.O.S.

**Likely routes of exposure:** Ingestion, inhalation and skin contact. May be absorbed from the gastrointestinal tract, through the intact skin, and through inhalation of fine spray mist.

**Eyes, nose, and throat:** Vapour or splash contact may cause burning, tearing, blurring of vision, keratopathy.

**Skin contact:** Dermatitis of varying severity may be noticed.

**Inhalation:** Irritating to the mucous membranes and upper respiratory tract.

**Eye contact:** Irritating to eyes.

**Skin contact:** Can be mildly irritating to skin.

**Ingestion:** Not toxic by ingestion of small amounts. See point 4 for symptoms.

**Inhalation:** May cause mild irritation to the upper respiratory tract.

### 4. FIRST AID MEASURES AND PRECAUTIONS

Dizziness and headache can occur with prolonged exposure.

**Inhalation:** Remove source of contamination or move victim to fresh air. Keep affected person warm and at rest. Supply oxygen if necessary. Treat symptomatically and supportively. **Seek medical advice immediately.**

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

**Eye contact:** Immediately flush eyes with gently flowing cold water or saline solution for 15 to 20 minutes, holding the eyelid(s) open. **Seek medical attention immediately.**

**Ingestion:** Have victim rinse mouth thoroughly with water. **Do not induce vomiting.** Seek medical advice immediately.

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

### 5. FIRE FIGHTING MEASURES

**Fire and explosion hazard:** Non-flammable. Non-combustible.

**Extinguishing agents:** Extinguish fires with water, dry powder, foam or carbon dioxide.

**Firefighting:** Move containers from fire area if possible. Fight fire from maximum distance. Stay away from storage tank ends. Contain fire control water for later disposal. Do not scatter material, extinguish only if flow can be stopped. Use flooding amounts of water as a fog. Solid streams may be ineffective. Cool containers with flooding amounts of water as far a distance as possible. Use water spray to absorb toxic vapours. Avoid breathing toxic vapours. Keep upwind. Consider evacuation of downwind area if material is leaking.

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**Personal protective equipment:** When heated to decomposition it emits toxic fumes of carbon oxides. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

**Personal precautions:** Avoid contact with skin and eyes. Do not breathe in fumes. For personal protection see Section 8. **Environmental precautions:** Do not allow entering drains or watercourses. When the product contaminates public waters, inform appropriate authorities immediately in accordance with local regulations.

**Occupational spill:** Do not touch spilled material. Stop leak if you can do so without risk. Spillage of pesticides at any stage of their storage or handling should be treated with great care. Liquid formulations may be reduced to solid phase by evaporation. Dry sweeping of solids is always hazardous: these should be removed by vacuum cleaning, or by dissolving them in water, or other solvent in the factory environment. Move containers from spill area. For larger spills, contain material far ahead of spill for later disposal. Keep spectators away. Isolate hazard area and deny entry. Ventilate closed spaces before entering.

### 7. HANDLING AND STORAGE REQUIREMENTS

**Handling:** Highly toxic by absorption or if swallowed. Avoid contact with eyes, prolonged contact with skin, and inhalation of dust and vapour. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Remove clothing immediately if the insecticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. 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. Employees piloting agricultural aircraft may not fly through the drift of an application, nor shall they start or continue an application if wind creates a drift hazard to themselves or others. No aerial applicator may mix or load pesticides containing dinitro-o-cresol in whole or in part, unless closed mixing or loading systems are used.

**Storage:** The product must be kept under lock and key. Keep out of reach of unauthorized persons, children and animals. Store in its original labeled container in shaded, well-ventilated area, away from heat, sparks and other sources of ignition. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

### 8. EXPOSURE CONTROL / PERSONAL PROTECTION

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. 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.

**Respirator:** An approved respirator suitable for protection from dusts and mists of pesticides is adequate. Limitations of respirator use specified by the approving agency and the manufacturer must be observed.

**Clothing:** Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with the substance.

**Gloves:** Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

**Eye protection:** The use of full-face protection is recommended. Contact lenses should not be worn when working with this chemical.

**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.

**Odour:** Sweet fatty alcohol odour.

**Density:** 0.87 g/ml at 20 °C.

**Storage stability:** Considered stable for a period of 2 years in normal air, warehouse and light conditions.

**Solubility in water:** Decanol is insoluble in water. Emulsifies in water.

**Flashpoint:** > 94 °C.

**Vapour density:** 4.5.

**pH:** Neutral.

**Melting Point:** 7 °C.

**Boiling point:** > 226.66 °C.

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### 10. STABILITY AND REACTIVITY

**Storage 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.

**Stability:** Stable under normal storage conditions.

**Incompatibility:** Strong oxidizers. Avoid extreme temperatures.

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

### 11. TOXICOLOGICAL INFORMATION

**Irritant. Acts as a defatting agent.**

**Acute oral LD<sub>50</sub>:** 4720 mg/kg in rats.

**Acute dermal LD<sub>50</sub>:** > 2 000 mg/kg in rabbits.

**Acute skin irritation:** Mild skin irritant.

**Acute eye irritation:** Mild irritant to eyes (rabbits).

**Inhalation:** Inhalation may be irritating to upper respiratory tract.

**Carcinogenicity, Mutagenicity, Teratogenicity:** No information available.

### 12. ECOLOGICAL INFORMATION

Does not pose any hazard to the environment. Gets broken down by microbes in the soil comparatively fast (98% removal after 2 years) Approved earth fill site, or use in agricultural situation as on label.

### 13. DISPOSAL CONSIDERATION

**Pesticide disposal:** Contaminated absorbents, used containers, surplus product, etc., should be burnt at 1000°C in an incinerator, preferably designed for pesticide disposal, or buried in designated landfill. Comply with local legislation applying to waste disposal.

**Package product wastes:** Emptied containers retain vapour and product residues. Observe all labeled 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** empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of a third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner.

Do not re-use the empty container for any other purpose but destroy it by perforation and flattening and bury in an

approved dumpsite. Prevent contamination of food, feedstuffs, drinking water and eating utensils. Comply with local legislation applying to waste disposal.

### 14. TRANSPORT INFORMATION

**UN NUMBER:** 3082  
**UN HAZARD CODE:** CLASS 9  
 Packaging group: III

### 15. REGULATORY INFORMATION

**Risk-Phrases** R 36/37/38  
**Symbol:** Xi  
**Indication of danger:** Irritant.  
**Risk phrases:**  
**R 36/37/38** Irritating to eyes, respiratory system and skin.  
**Safety phrases:**  
**S 2** Keep out of reach children.  
**S 36/39** Wear suitable protective clothing and eye/face protection.  
**S 38** In case of insufficient ventilation, wear respiratory equipment.  
**S 46** In case of accident or if you feel unwell, seek medical advice (show the label where possible.)

### 16. PACKING AND LABELLING

Packed in 5, 20, 100 and 200 litres metal drums or fluorinated high-density polyethylene plastic containers and labeled according to South African regulations and guidelines.

### 17. OTHER INFORMATION

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the PRODUCT AS SUCH. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

It is the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulations(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

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### ***END OF DOCUMENT***

**Compiled:** August 1998  
**Reviewed:** March 2019  
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**Next revision:** March 2024

For detailed information on revisions, contact the  
Registration holder.