according to WHS Regulations

Printing date 10.09.2018 Revision: 10.09.2018

1 Identification

Product Name: GENFARM 2,4-D LV ESTER 680 HERBICIDE

Other Means of Identification: Mixture

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

Details of Manufacturer or Importer:

Nutrien Ag Solutions Limited

Level 5, Building A 26 Talavera Road

Macquarie Park NSW 2113

Phone Number: 02 9889 5400

Emergency telephone number: National Poison 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)



Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Acute Toxicity (Oral) 4 H302 Harmful if swallowed. Skin Corrosion/Irritation 2 H315 Causes skin irritation.

Serious Eye Damage/Irritation 2A H319 Causes serious eye irritation.

Skin Sensitisation 1 H317 May cause an allergic skin reaction.

Aquatic Acute 2 H401 Toxic to aquatic life.

Signal Word Warning

Hazard Statements

H302 Harmful if swallowed. H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

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

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P321 Specific treatment (see on this label).

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

P391 Collect spillage.

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

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:

CAS: 1928-43-4 2,4-D present as the ethylhexyl ester

89.8%

Acute Toxicity (Oral) 3, H301; Aquatic Acute 1, H400; Aquatic Chronic 1,

H410; (1) Skin Sensitisation 1, H317

Additional information: 89.8% of 2,4-D present as the ethylhexyl ester is equivalent to 680g/L 2,4-D acid.

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 symptoms occur.

Eye Contact:

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

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause mild respiratory irritation, coughing, burning sensation, dizziness and temporary loss of coordination.

Skin Contact: Causes skin irritation and itchiness. May cause an allergic skin reaction.

Eye Contact: Cause serious eye irritation, stinging, redness and watering.

Ingestion: Harmful if swallowed. May cause irritation, redness and burning sensation of mouth and throat, nausea, fatigue and weakness.

5 Fire Fighting Measures

Suitable Extinguishing Media: Alcohol or regular foam.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, hydrogen chloride, other chlorine compounds and water.

Combustible liquid Class 2.

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

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Special Protective Equipment and Precautions for Fire Fighters:

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

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear appropriate respiratory protection and protective clothing. 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.

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 in labelled containers for disposal, wash area after spills.

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. 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. Contaminated work clothing must not be allowed out of the workplace. 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 container tightly closed when not in use. Protect from heat, sparks, open flames and other sources of ignition. Keep away from oxidising agents, acids and bases.

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 vapour respirator 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:

PVC or rubber 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:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

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9 Physical and Chemical Properties

Appearance:

Form: Liquid

Colour: Amber coloured
Odour: Mild phenolic
Odour Threshold: Not determined.
pH-Value: 3.4 (1% suspension)
Melting point/freezing point: No information available

Initial Boiling Point/Boiling Range: 317 °C Flash Point: >103 °C

Flammability: Combustible Liquid Class 2
Auto-ignition Temperature: No information available
Decomposition Temperature: No information available

Explosion Limits:

Lower: No information available Upper: No information available

Vapour Pressure at 20 °C: 5x10⁻⁶ kPa Relative Density at 20 °C: 1.137

Vapour Density:No information availableEvaporation Rate:No information available

Solubility in Water at 20 °C: 0.01 g/L

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

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

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

Incompatible Materials: Oxidising agents, acids and bases.

Hazardous Decomposition Products:

Oxides of carbon, hydrogen chloride, other chlorine compounds and water.

11 Toxicological Information

Toxicity:

| LD ₅₀ /LC ₅₀ Values Relevant for Classification: | | |
|--|------------------|-----------------------------|
| CAS: 1928-43-4 2,4-D present as the ethylhexyl ester | | |
| Oral | LD ₅₀ | 320-1000 mg/kg (guinea pig) |
| | | 370 mg/kg (mouse) |
| | LD50 | 375-666 mg/kg (rat) |
| Dermal | LD ₅₀ | 1400 mg/kg (rabbit) |
| | LD50 | 1500 mg/kg (rat) |
| Inhalation | LC50 | >5.4 mg/L / 4 hr (rat) |

Acute Health Effects

Inhalation:

May cause mild respiratory irritation, coughing, burning sensation, dizziness and temporary loss of coordination.

Skin: Causes skin irritation and itchiness. May cause an allergic skin reaction.

Eye: Cause serious eye irritation, stinging, redness and watering.

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Ingestion:

Harmful if swallowed. May cause irritation, redness and burning sensation of mouth and throat, nausea, fatigue and weakness.

Skin Corrosion / Irritation: Causes skin irritation.

Serious Eye Damage / Irritation: Causes serious eye irritation.

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

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

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

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

Chronic Health Effects: Repeated and prolonged occupational overexposure may cause liver disorder.

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for 2,4-D 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: Comm. Dept. of Health and Ageing Office of Chemical Safety, 'ADI List', June 2014).

12 Ecological Information

Ecotoxicity: 2,4-D is moderately toxic to birds and bees.

Aquatic toxicity:

Toxic to aquatic life with long lasting effects.

CAS: 1928-43-4 2,4-D present as the ethylhexyl ester

LC₅₀/96 h >10 mg/L (crustacea)

Persistence and Degradability:

2, 4-D has low soil persistence. The half-life in soil is less than 7 days. Soil microbes are primarily responsible for its disappearance.

Bioaccumulative Potential: Bioaccumulation is not expected to occur.

Mobility in Soil: No information available
Other adverse effects: No 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 ADG

Not regulated

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IMDG, IATA UN3082

Proper Shipping Name

ADG Not regulated

IMDG, IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

LIQUID. N.O.S.

Dangerous Goods Class

ADG Class: Not regulated

IMDG Class: 9 Miscellaneous dangerous substances and articles.

Packing Group:

ADG Not regulated

IMDG, IATA III
Marine pollutant: No

Symbol (fish and tree)

EMS Number: F-A,S-F Hazchem Code: •3Z

Special Provisions: 179, 274, 331, 335, AU01

Limited Quantities: 5L

Packagings & IBCs - Packing Instruction: P001, IBC03, LP01

Packagings & IBCs - Special Packing Provisions: PP1
Portable Tanks & Bulk Containers - Instructions: T4

Portable Tanks & Bulk Containers - Special

Provisions: TP1, TP29

15 Regulatory Information

Australian Inventory of Chemical Substances: This chemical is not found in AICS.

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

Poisons Schedule: 6

16 Other Information

Date of Preparation or Last Revision: 10.09.2018

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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)

Acute Toxicity (Oral) 3: Acute toxicity – Category 3 Acute Toxicity (Oral) 4: Acute toxicity – Category 4

Skin Corrosion/Irritation 2: Skin corrosion/irritation - Category 2

Serious Eye Damage/Irritation 2A: Serious eye damage/eye irritation - Category 2A

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

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Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1 Aquatic Acute 2: Hazardous to the aquatic environment, short-term (Acute). Category 2 Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment, long-term (Chronic). Category 2

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 - February 2016"

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