

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

SECTION 1 - PRODUCT & COMPANY IDENTIFICATION

Product Name: **FARMAG 2,4-D 720 SL**
 Product Use: Herbicide
 Effective Date: April 2018
 Revision Date: March 2021

Company Name: **FarmAg International (Pty) Ltd.**
 Mount Edgecombe,
 4300, South Africa.

Address: P. O. Box 1523 61 Marshall Drive,
 Durban Old Mill Industrial Park
 4000 Mount Edgecombe

Phone No: [031] 003 3486

In case of Poisoning:

Griffon Poison Information Centre : 082 446 8946

Western Cape Poison telephone service: 0861 555 777

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Common Name: 2,4-D
 Chemical Name: (2,4-dichlorophenoxy)acetic acid (IUPAC)
 CAS No.: 94-75-7
 Chemical family: Phenoxyacetic acid
 Molecular formula: C₈H₆Cl₂O₃
 Use: Herbicide used to control a wide range of annual and perennial weeds.
 Formulation: **2,4-D 720 g/l**
 Soluble Concentrate

Hazardous ingredients of toxicological concern:

<u>Inert:</u>	<u>concern:</u>	<u>% present:</u>
2,4-D	harmful	± 80%

Symbol: **X_i, X_n, N**

Indication of Danger: Irritating, harmful and toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.

RISK-PHRASE(S) R20/22, R36/38, R 51/52

SECTION 3 - HAZARD IDENTIFICATION**Toxicity class:**

WHO: III

Likely routes of exposure:

Eye contact, skin contact, ingestion, and inhalation.

Ingestion:

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

Eye contact: Irritating to eyes, may cause irreversible eye damage.

Skin contact: Mild irritant to skin.

Ingestion: Toxic if ingested in large amounts.

SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS

Inhalation:

Immediately remove source of contamination or move victim to fresh air. If breathing has stopped, perform artificial respiration and administer oxygen. Do not give mouth-to-mouth resuscitation if victim ingested or inhaled the substance. Keep person warm and at rest. Treat symptomatically and supportively as and when required. Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Notes to physicians: There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient.

Skin contact:

Remove contaminated clothing, shoes and leather goods immediately. Gently wipe off excess chemical. Wash skin gently and thoroughly with non-abrasive soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15 to 20 minutes). Seek medical advice if irritation develops and persists.

Eye contact:

Immediately flush the eyes with gently flowing lukewarm water or sodium bicarbonate solution for 20 to 30 minutes, occasionally lifting the upper and lower lids. If irritation persists, seek medical advice immediately.

Ingestion:

Do not induce vomiting. Never induce vomiting or give anything to drink to an unconscious person. If the person is alert, rinse mouth thoroughly with water and give one or two glasses of water to drink. Treat symptomatically and supportively. Call a physician or Poison Control Center.

Advice on treatment:

No specific antidote available. Treat symptomatically and supportively.

SECTION 5 - FIRE-FIGHTING MEASURES

Flash point: Not Flammable

Extinguishing agents:

Extinguish fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray as a fog can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Contain water used for fire-fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

Extinguishing media:

Carbon dioxide, dry chemical powders, foam and water spray.

Personal protective equipment:

Fire-fighters and others that may be exposed should wear full protective impervious clothing, including gloves and eye protection, and self-contained breathing apparatus. Contact with the fumes and vapours should be avoided by staying upwind. Clean all clothing before re-use. Severely contaminated clothing cannot be adequately decontaminated, and must be disposed as a hazardous waste. Shower with soap and water after contact with this product.

SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal precautions:

Avoid contact with skin and eyes. Do not inhale spray or fumes. For personal protection see Section 8.

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

Environmental precautions:

Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

Occupational spill:

For small liquid spills, soak up with lime, damp earth or sand, or other non-combustible absorbent material and place into containers for later disposal. For large liquid spills, contain the liquid for later disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Do not flush spilled material into drains. Keep spectators away.

SECTION 7 - HANDLING AND STORAGE REQUIREMENTS

Handling:

Harmful if swallowed. Irritant to eyes and skin. Avoid contact with eyes and skin, and inhalation of dust, spray and vapour. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Remove clothing immediately if the product 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.

Storage:

Keep out of reach of unauthorized persons, children and animals. Store in its original labelled container in shaded, well-ventilated area. Store in dry area. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

Comply with occupational safety, environmental, fire, and other applicable regulations.

PERSONAL PROTECTIVE EQUIPMENT:

Respirator:

Where exposure through inhalation may occur when handling and/or when preparing the spray mixture, wear a face mask. If the product is used in dusty or confined conditions or spillage and fire conditions a respirator suitable for protection from dusts and mists of pesticides is adequate.

Clothing:

Employee must wear appropriate protective (impervious) clothing, boots, hat and equipment to prevent repeated or prolonged skin contact with this substance. Do not wear leather clothing.

Gloves:

Employee must wear appropriate chemical resistant protective gloves to prevent contact with this substance.

Eye protection:

The use of safety goggles (full-face shield) is recommended.

Emergency eye wash: 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.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Brown to Amber transparent liquid.

Odour: Not available

Flammability: Not flammable

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

pH: 7,0 - 9,0
 Specific gravity: 1.2 g/ml @ 20°C

SECTION 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.

Material to avoid:

Avoid strong bases and acids.

Polymerization:

Product unlikely to undergo polymerisation processes.

Decomposition products:

Under heating conditions: carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke may be emitted, nitrogen and its compounds, may emit and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas, hydrogen chloride gas, other compounds of chlorine and water may be produced.

SECTION 11 -

Acute oral LD₅₀ :	767mg/kg (calc.)
Acute dermal LD₅₀:	>1920 mg/kg (calc.)
Acute inhalation LC₅₀ (4h):	2.15 mg/l (calc.)
Acute skin irritation:	Mild skin irritant
Acute eye irritation:	Mild eye irritant
Dermal sensitisation:	Mild skin sensitiser
2,4-D tech.: ADI:	0.01 mg/kg b.w. [2001, 1997]

SECTION 12 - ECOLOGICAL INFORMATION**Mobility, Degradability & Accumulation:**

Animals in rats, following oral administration, elimination is rapidly, and mainly as the unchanged substance. Following single dose of up to 10 mg/kg, excretion is almost complete after 24 hours, although, with higher doses, complete elimination takes longer. The maximum concentration in organs is reached after c. 12 hours. A plant in plants metabolism involves hydroxylation, decarboxylation, cleavage of acid side-chain and ring opening. Soil/environment in soil, microbial degradation involves hydroxylation, decarboxylation cleavage of the acid side-chain and ring opening. DT₅₀ in soil <7 d. K_{oc} c. 60. Rapid degradation in the soil prevents significant downward movement under normal conditions.

ECOTOXICOLOGY (technical material):

Birds: Oral LD₅₀: for wild ducks >1000, Japanese quail 668, pigeons 668, pheasants 472 mg/kg. Dietary LC₅₀ (96 h) for Mallard ducks > 5620 mg/kg diet.

Fish: Some formulations (esters) are toxic to fish whilst others are not. LC₅₀ (96 hours): rainbow trout: >100 mg/l.

Daphnia magna: LC₅₀: (21 d) 235 mg/l.

Algae: LC₅₀ (5 d) for *Selenastrum carpicornutum* 33.2 mg/l.

Bees: Not toxic to bees. LD50 (oral) 104.5 µg/bee.

Worms: LC₅₀ (7 d) 860 mg/kg. NOEC (14 d) 100 g/kg.

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

SECTION 13 - DISPOSAL CONSIDERATION**Pesticide and container disposal:**

Open dumping or burning of this pesticide is prohibited. Never pour untreated waste or surplus products 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.

Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed.

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 third of the volume 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 purposes but destroy it by perforation, 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.

SECTION 14 - TRANSPORT INFORMATION**UN NUMBER:** 3082**Road Transport ADR/IRD:**

Class: 9

Packing group: III

Shipping name: Environmentally hazardous substance, Liquid, N.O.S.
(2,4-D 720 SL)**Air Transport ICAO/IATA:**

Class: 9

Packing group: III

Shipping name: Environmentally hazardous substance, Liquid, N.O.S.
(2,4-D 720 SL)**Maritime Transport IMDG/IMO:**

Class: 9

Packing group: III

Shipping name: Environmentally hazardous substance, Liquid, N.O.S.
(2,4-D 720 SL)
Marine pollutant**SECTION 15 - REGULATORY INFORMATION****Symbol:** X_i, X_n, N**Indication of danger:** Irritating, harmful and toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.**Risk phrase(s):****R 20/22** Harmful by inhalation and if swallowed,**R 36/38** Irritating to eyes and skin,**R 51/53** Toxic to aquatic organisms, may cause long-term adverse effects in aquatic environment.**Safety phrases:**

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

- S 1/2** Keep out of reach children.
- S 13** Keep away from food, drink and animal feeding stuffs.
- S 22** Do not breathe dust.
- S 24/25** Avoid contact with skin and eyes.
- S 26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 36/37/39** Wear suitable protective clothing, gloves and eye/face protection.
- S 61** Avoid release to the environment. Refer to special instructions/safety data sheets.

SECTION 16 - OTHER INFORMATION

Packaging:

Packed in 1, 5, 10, 20 and 25 litres plastic containers and labeled according to South African regulations and guidelines.

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 use of the product. It is not applicable to unusual or non-standard uses of the product or 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.

End of document