Revision date: July 04

Version no. 4



MATERIAL SAFETY DATA SHEET

1. Identification of the substance/preparation and company/undertaking

Preparation name: FALGRO 4L

Use of preparation: Horticultural plant growth regulator for professional use

Supplier: Fine Agrochemicals Ltd, Hill End House, Whittington

Worcester, WR5 2RQ, Tel: +44 01905 361800

2. Composition/Information On Ingredients:

Product: A solution of 4% gibberellic acid

Cas No: 77-06-5 **Einecs No:** 201-001-0

Hazardous Ingredients: Classification: Concentration: Solvent Xi, F, R11 R36 R67 96% by weight

3. <u>Hazards identification</u>

Highly Flammable Irritating to eyes

Vapours may cause drowsiness & dizziness

4. First aid measures

After inhalation: Remove the person to a well ventilated area. Ensure the person is

warm and comfortable. Obtain immediate medical attention.

After skin contact: Remove contaminated clothing. Wash the affected area

thoroughly with soap and water. Obtain medical attention if

irritation occurs.

After eye contact: Irrigate eyes with running water for at least 15 minutes.



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4. First aid measures (cont'd.)

After swallowing: Do not induce vomiting or give liquids. Seek medical advice.

5. Fire fighting measures

Flammability: Highly Flammable
Flash Point: 14°C (PM Closed cup)

Extinguishing Media: Use water mist, fog, CO₂, foam and/or dry powder

Special exposure hazards: Flammable liquid and vapour

Fire Fighting Equipment: Wear full protective clothing and self-contained breathing

apparatus.

Products of combustion and

decomposition:

Carbon compounds.

6. Accidental release measures

Personal Precautions

Wear protective clothing, see Section 8. <u>Exposure control/personal protection</u>. Keep away from sources of ignition.

Environmental precautions

Prevent product or contaminated water entering drains.

Methods for cleaning up.

In case of spillage, use inert absorbent materials. Isolate spilled material for safe disposal and collect in sealable polylined containers. Ventilate area. Dispose of contaminated material in accordance with local regulations.

7. Handling and storage

Handling

Protect against physical damage and store in cool, dry well-ventilated location, away from sources of ignition. Keep away from drink and foodstuffs.



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7. Handling and storage (cont'd.)

Do not smoke in the workplace. Avoid contact with spray. Wash thoroughly after handling.

Storage

Store in dry, cool (below 32°C) conditions in original container. Use flammable liquid storage area.

8. Exposure controls/personal protection

Exposure controls

To avoid risks to man and the environment comply with instructions for use

Occupational exposure controls

- Respiratory protection

Avoid inhaling vapour, work in a well ventilated area

- Hand protection

Chemical resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or vinyl should be worn. Refer to product label for more information.

- Eye protection

Glasses/goggles should be worn or face mask used

- Skin protection :

Wear sensible regularly laundered overalls. Gloves and boots should be worn.

9. Physical and chemical properties:

General information

Appearance: Clear faintly straw coloured liquid

Odour: Alcoholic

Important health, safety and environmental information

pH (50% v/v solution) in water: 3.28 Boiling point: 82°C

Flash point: 14°C (PM Closed cup)



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9. Physical and chemical properties (cont'd.)

Flammability: Highly Flammable

Explosive properties: Lower Explosive Limit in air: 2.5% Upper Explosive Limit in air: 12.7%

Oxidising properties: Reacts with strong oxidising agents

Vapour pressure @ 20°C: 4.4 kPa Relative density: 0.8003 g/ml

Solubility

- Water solubility @ 20°C: Soluble at all concentrations

fat solubility: No data
 Partition coefficient: No data
 Viscosity: 3.4503 mm²/s

Vapour density (air =1): 2.1 Evaporation rate (BuAc=1): 2.83

Other information Auto ignition 445.6°C

10. Stability and reactivity

Stable in original containers for at least 3 years at ambient temperatures.

Conditions to avoid

- Excessive heat and direct sunlight. Keep away from sources of ignition.

Materials to avoid

Incompatible with strong oxidising agents.

Hazardous decomposition products

None under normal conditions of storage and use.

11. <u>Toxicological information</u>

Acute toxicity

Oral: LD_{50} Rat: >5050 mg/kg Inhalation: LC_{50} Rat >5.23 mg/l LD_{50} Rabbit: >2020 mg/kg



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11. Toxicological information (cont'd.)

Irritation

Eye: Highly eye irritant

Skin: Slight

Respiratory tract: Studies have revealed no observable abnormalities.

Corrosivity: Non-corrosive

Sensitisation

Skin: Non-sensitising

Chronic toxicity: No studies available
Carcinogenicity: None (active ingredient)
Mutagenicity: None (active ingredient).
Reproductive tox: No studies available

Note: Gibberellic acid is a plant growth hormone that has been reported to have

estrogenic and androgenic activity in animals.

Toxicity Class: WHO (a.i.) U; EPA III (active ingredient)

12. Ecological information

Ecotoxicity

Fish: Not toxic but avoid contamination of water courses. LC₅₀ (96h)>112mg/L

Oncorhynchus mykiss (active ingredient).

Daphnia: Not toxic but avoid contamination of water courses. EC₅₀ (48h)>122mg/L

Daphnia Magna (active ingredient).

Algae: LC₅₀ (72h)>100 mg/l; NOEC≥100 mg/l

Bird: LD₅₀ > 2250 mg/kg *Colinus virginianus* (active ingredient)
Bee: LC₅₀ (contact 48h)>25µg/bee *Apis mellifera* (active ingredient).

Persistence and degradability.

Active ingredient is non-toxic and degrades rapidly under biological conditions.

13. Disposal considerations

Product: May be taken to waste disposal site or incineration plant when in compliance

with local regulations refer to the local waste regulation authority.

Packaging: Empty containers can be landfilled when in accordance with local regulation.



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14. Transport information

UN number: 1993 Class 3.2 Packaging group II Marine Pollutant No

Other applicable information IATA Class III / ADR Class III

15. Regulatory Information

Symbol(s): Xi Irritant

F Highly Flammable

Risk Phrases: R11 Highly flammable

R-36 Irritating to eyes

R-67 Vapours may cause drowsiness & dizziness

Safety Phrases: S2 Keep out of reach of children

S7 Keep container tightly closed

Keep away from food, drink and animal feed stuffs
 Keep away from source of ignition – No smoking

S20 When using do not eat or drink S24/25 Avoid contact with skin & eyes

S26 In case of contact with eyes, rinse immediately with

Plenty of water and seek medical advice

S36/37/39 Wear suitable protective clothing, gloves and

eye/face protection

Use only in well ventilated areas.

Specific provisions Restricted to professional users

To avoid risks to man and the environment, comply

with the directions for use.

16. Other information:

For further information on the product and product use refer to the product label

This version replaces all previous versions



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