
SAFETY DATA SHEET

SECTION 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

- Product Name: Pirouette

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/mixture: Plant growth regulator for professional use only
- Not to be used for: Anything other than professional use

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Fine Agrochemicals Limited
- Address of Supplier: Hill End House, Whittington, Worcester, WR5 2RQ. UK
- Telephone: +44 (0)1905 361800
- Responsible Person: Safety Department
- Email: sds@fine.eu

1.4 Emergency telephone number

- Emergency Telephone: +44 (0)1905 361800 (Office hours 9am-5pm GMT)
 - Or call local Poison Control Centre
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SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

- DPD: No longer applicable
- CLP: Chronic aquatic toxicity category 2

2.2 Label elements



- Symbols
Signal Word: None assigned
- Hazard phrases
Toxic to aquatic life with long lasting effects (H411).
- Precautionary Phrases
Avoid release to the environment (P273).
Collect spillages
Dispose of contents/container to an authorised waste collection point (P501)

2.3 Other hazards

- To avoid risks to human health and the environment, comply with the instructions for use (EUH401).
 - EUH 208 Contains 1,2-benzisothiazol-3(2H)-one may cause an allergic reaction
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SECTION 3 Composition/information on ingredients

3.1 Mixtures

SECTION 3 Composition/information on ingredients (....)

- Paclobutrazol
 - CAS Number: 76738-62-0
 - EC Number: 266-325-7
 - Categories: Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1, Repr. 2
 - H Phrases: H332, H400, H410, H361d
 - Concentration: 4 g/l

 - Dispersant
 - CAS Number: None assigned
 - EC Number: None assigned
 - Categories: Acute Tox. 4, Eye Irrit. 2, Skin Irrit. 2
 - H Phrases: H302, H319, H315
 - Concentration: < 20 g/l

 - Biocide
 - CAS Number: None assigned
 - EC Number: None assigned
 - Categories: Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, Aquatic Acute 1
 - H Phrases: H302, H314, H317, H400
 - Concentration: < 10 g/l
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SECTION 4 First aid measures

4.1 Description of first aid measures

- Contact with eyes
 - If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes
 - Seek medical attention if irritation persists

- Contact with skin
 - Remove contaminated clothing immediately and drench affected skin with plenty of water. Then wash with soap and water
 - Seek medical attention if irritation persists

- Ingestion
 - If swallowed: Call a poison center or doctor/physician if you feel unwell, rinse mouth

- Inhalation
 - Keep warm and at rest, in a half upright position. Loosen clothing
 - Remove promptly anything of a restrictive nature
 - Seek medical advice if necessary

4.2 Most important symptoms and effects, both acute and delayed

- No information available

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically
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SECTION 5 Fire-fighting measures

5.1 Extinguishing media

- In case of fire use foam, carbon dioxide or dry agent

5.2 Special hazards arising from the substance or mixture

SECTION 5 Fire-fighting measures (....)

- Large volumes may penetrate soil and contaminate groundwater
- Seek expert advice for removal and disposal of all contaminated materials and wastes

5.3 Advice for firefighters

- Flammability: Non-flammable
 - Wear chemical protection suit and positive-pressure breathing apparatus
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SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear protective clothing as per section 8

6.2 Environmental Precautions

- Do not allow to enter public sewers and watercourses
- Contain spillage by any means possible
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6.3 Methods and material for containment and cleaning up

- Absorb spillage in suitable inert material
- Place in sealable container
- Remove contaminated material to safe location for subsequent disposal

6.4 Reference to other sections

- See Section 8
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SECTION 7 Handling and storage

7.1 Precautions for safe handling

- Ensure adequate ventilation
- Keep away from food, drink and animal feedingstuffs
- The usual precautions for handling chemicals should be observed
- Use good personal hygiene practices
- Wash thoroughly after use

7.2 Conditions for safe storage, including any incompatibilities

- Keep in a cool, dry, well ventilated place
- Stable in original container for at least 2 years at 18 - 22°C

7.3 Specific end use(s)

- Restricted to professional users
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SECTION 8 Exposure controls/personal protection

8.1 Control parameters

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

8.2 Exposure controls

- No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dust mask
 - Wear suitable protective clothing and gloves
 - Contaminated clothing should be laundered before reuse
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SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

SECTION 9 Physical and chemical properties (....)

- Appearance: brown, free-flowing, Liquid
- Odour: Not available
- pH: pH 6.5 at 1 % concentration
- Melting point/Range: Not applicable
- Boiling Point/Range: No information available
- Flashpoint: None
- Evaporation Rate: No information available
- Flammability: Non-flammable
- Vapour Pressure: No information available
- Vapour Density: Not applicable
- Density: 1.02 g/ml
- Solubility in water: Miscible with water
- Partition Coefficient (n-Octanol/Water): No information available
- Autoignition Temperature > 400°C
- Viscosity: 66 mm²/s
- Explosive Properties: Non-explosive
- Oxidising Properties: Non oxidising

9.2 Other information

SECTION 10 Stability and reactivity

10.1 Reactivity

- Stable in original container for at least 2 years at 18 - 22°C

10.2 Chemical stability

- Considered stable under normal conditions

10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

10.4 Conditions to avoid

- Keep away from heat and sources of ignition

10.5 Incompatible materials

- Incompatible with strong oxidizing substances

10.6 Hazardous Decomposition Products

- Decomposition products may include toxic and irritant fumes
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SECTION 11 Toxicological information

11.1 Information on toxicological effects

- LD50 (oral) : (rat) >2020 mg/kg
- LC50 (inhalation) : (rat) > 2.25 mg/l/4hr
- LD50 (dermal) : (rat) >2020 mg/kg
- Contact with eyes: (rabbit) Non irritant
- Contact with skin: (rabbit) Non irritant
- Corrosivity: Non Corrosive
- Sensitisation: Sensitization (guinea pig) : None
- Repeated Dose Toxicity: No information available
- Carcinogenicity: No evidence of carcinogenic effects

SECTION 11 Toxicological information (....)

- Mutagenicity: No evidence of mutagenic effects
 - Reproductive Effects: No evidence of reproductive effects
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SECTION 12 Ecological information

12.1 Toxicity

- LC50 (fish): > 100 mg/l (96hr), NOEC >100mg/l
- EC50 (Daphnia magna): >100 mg/l (48hr), NOEC > 100 mg/l
- EC50 (Algae): > 100 mg/l (72hr), NOEC 3.05-31.3 mg/l
- EC50 (Lemna): 7.5 mg/l (7day), NOEC 0.32 mg/l
- LC50 (Bird): > 2100 mg/kg (a.i.)
- LD50 (bee) : > 2.0 µg/bee (ai) (Oral), > 40.0 µg/bee (ai) (Contact)
- Earthworm: > 500 mg/Kg soil dw (ai)
- LR50 (Aphidius) : > 40 L/ha (48hr)
- LR50 (Typhlodromus): > 40 L/ha (7 day)

12.2 Persistence and degradability

- Not readily biodegradable

12.3 Bioaccumulation Potential

- Bioconcentration factor has been estimated at 44

12.4 Mobility in soil

- No information available

12.5 Results of PBT and vPvB assessment

- Not applicable

12.6 Other Adverse Effects

- No information available
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SECTION 13 Disposal considerations

13.1 Waste treatment methods

- Do not discharge into drains or the environment, dispose to an authorised waste collection point
 - Incineration by an approved method could be considered
 - Do not reuse empty containers
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SECTION 14 Transport information

14.1 UN Proper Shipping Name

- UN No.: UN 3082

14.2 Proper Shipping Name

- Proper Shipping Name: Environmentally Hazardous Substance, Liquid, n.o.s.
(Contains Paclobutrazol)

14.3 Transport hazard class(es)

- Hazard Class: 9

14.4 Packing group

- Packing Group: III

14.5 Environmental hazards

- Marine Pollutant

14.6 Special precautions for user

SECTION 14 Transport information (....)

- Restricted to professional users
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
- Not applicable
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SECTION 15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Registered under regulation 1107/2009/EC

15.2 Chemical Safety Assessment

- A chemical safety report is not required since the product is already registered under the crop protection regulation 1107/2009/EC.
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SECTION 16 Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:- H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage. H315: Causes skin irritation. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H332: Harmful if inhaled. H361d: Suspected of damaging the unborn child. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects.

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

Reason for Revision: New format, Removal of DPD data / new data

The information provided in this Safety Data Sheet is accurate as of the date indicated and is compiled on the basis of Fine Agrochemicals' current knowledge and experience. It does not purport to be an exhaustive assessment. The data is supplied in good faith and is intended to provide health and safety guidance on the handling, storage, transportation and disposal of the material in / from the package in which it is supplied. It is not a substitute for the product label which must be consulted in tandem when applying the material. The information is specific to the material only and may not be valid when it is mixed or used with other materials. Fine Agrochemicals assumes no responsibility for any incidental or consequential damages arising from the use of this data and expressly disclaims any liability for loss, injury, damages or expenses arising from any failure to take into account the information or advice contained in this document.