

CLAYTON PLANT PROTECTION

CLAYTON PROVINCE Safety Data Sheet according to Regulation (EU) No. 1907/2006 Version 1/dsc 17/9/2019
This version replaces all previous versions

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

- 1.1. Product identifier CLAYTON PROVINCE
1.2. Relevant identified uses of the substance or mixture and uses advised. FUNGICIDE
1.3. Details of the supplier of the safety data sheet : Marketing Company
Clayton Plant Protection Ltd., Bracetown Business Park, Clonee, Dublin15. Ireland.
Tel: (00 353) 1 8210127 www.claytonpp.com Email: info@claytonpp.com

SECTION 2: Hazards Identification

- 2.1 Classification of the substance or mixture
Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.
Eye irritation: Category 2 H319 Causes serious eye irritation.
Specific target organ toxicity - single exposure: Category 3 H335 May cause respiratory irritation.
Acute aquatic toxicity: Category 1 H400 Very toxic to aquatic life.
Chronic aquatic toxicity: Category 1 H410 Very toxic to aquatic life with long lasting effects.

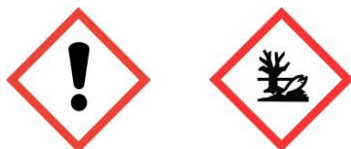
2.2 Label elements

Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply/use required.

Hazardous components which must be listed on the label: Prothioconazole. N,N-Dimethyl decanamide

Pictogram:



Signal Word	Warning
Hazard statements	H319 Causes serious eye irritation. H335 May cause respiratory irritation. H410 Very toxic to aquatic life with long lasting effects. EUH401 To avoid risks to human health and the environment, comply with the instructions for use. EUH208 Contains 2-[2-(1-chlorocyclopropyl)-2-hydroxy-3-phenylpropyl]-2,4-dihydro-3H-1,2,4-triazole-3-thione. May produce an allergic reaction.
Precautionary statements	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P308 + P311 IF exposed or concerned: Call a POISON CENTRE/ doctor/ physician. P501 Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

2.3 Other hazards - No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature - Emulsifiable concentrate (EC) Prothioconazole 250 g/l

Hazardous components

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No. / EC-No. / REACH Reg. No.	Classification REGULATION (EC) No 1272/2008	Conc. [%]
Prothioconazole	178928-70-6	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	25.00
N,N-Dimethyl decanamide	14433-76-2 238-405-1 01-2119485027-36-XXXX	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 3, H412	> 20.0

Further information

Prothioconazole 178928-70-6 M-Factor: 10 (acute) M-Factor: 10 (acute)

For the full text of the H-Statements mentioned in this Section, see Section 16.

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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.

Inhalation Move to fresh air. Keep patient warm and at rest. Call a physician or poison control centre immediately.

Skin contact Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. Get medical attention if irritation develops and persists.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Do NOT induce vomiting. Call a physician or poison control centre immediately.

4.2 Most important symptoms and effects, both acute and delayed Symptoms

No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment Treat symptomatically. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. There is no specific antidote.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media - Suitable Water spray, Carbon dioxide (CO₂), Foam, Sand
Unsuitable High volume water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire the following may be released: Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Sulphur oxides, Nitrogen oxides (NO_x)

5.3 Advice for firefighters Special protective equipment for firefighters In the event of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus and protective suit.

Further information Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.

6.2 Environmental precautions - Do not allow to get into surface water, drains and ground water. If spillage enters drains leading to sewage works inform local water company immediately. If spillage enters rivers or watercourses, inform the Environment Agency (emergency telephone number 0800 807060).

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

Additional advice Check also for any local site procedures.

6.4 Reference to other sections

Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Ensure adequate ventilation.

Hygiene measures Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Protect from frost. Keep away from direct sunlight.

Advice on common storage Keep away from food, drink and animal feeding-stuffs.

Suitable materials HDPE (high density polyethylene) 7.3

Specific end use(s) Refer to the label and/or leaflet.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure controls

Refer to COSHH assessment (Control of Substances Hazardous to Health (Amendment) Regulations 2004).

Engineering controls should be used in preference to personal protective equipment wherever practicable. Refer also to COSHH Essentials.

Personal protective equipment - In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection - Wear respirator with an organic vapours and gas filter mask (protection factor 10) conforming to EN140 type A or equivalent. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

Hand protection - Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet. Material Nitrile rubber Rate of permeability > 480 min Glove thickness > 0.4 mm Protective index Class 6 Directive Protective gloves complying with EN 374.

Eye protection - Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

Skin and body protection - Wear standard coveralls and Category 3 Type 6 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form clear to slightly turbid, liquid

Colour tan Odour aromatic

pH 5.0 - 6.0 at 1 % (23 °C) (deionized water)

Flash point >100 °C

Density ca. 1.00 g/cm³ at 20 °C

Partition coefficient: noctanol/water Prothioconazole: log Pow: 3.82 at 20 °C at pH 7

N,N-Dimethyldecanamide: log Pow: 2.46

Surface tension 29.9 mN/m at 20 °C

Explosivity Not explosive

9.2 Other information Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity Thermal decomposition Stable under normal conditions.

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions No hazardous reactions when stored and handled according to prescribed instructions.

10.4 Conditions to avoid Extremes of temperature and direct sunlight.

10.5 Incompatible materials Store only in the original container.

10.6 Hazardous decomposition products No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity LD50 (Rat) > 2,500 mg/kg

Acute inhalation toxicity (Rat) > 5 mg/l Exposure time: 4 h Highest attainable concentration.

Determined in the form of a respirable aerosol.

Irritating to respiratory system. The value mentioned relates to N,N-dimethylacetamide.

Acute dermal toxicity LD50 (Rat) > 4,000 mg/kg

Skin irritation No skin irritation (Rabbit)

Eye irritation Irritating to eyes. (Rabbit)

Sensitisation Non-sensitizing. (Guinea pig) OECD Test Guideline 406

Assessment STOT Specific target organ toxicity – single exposure

Prothioconazole: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

Prothioconazole did not cause specific target organ toxicity in experimental animal studies. N,N-Dimethyldecanamide did not cause specific target organ toxicity in experimental animal studies

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Assessment mutagenicity - Prothioconazole was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

N,N-Dimethyldecanamide was not genotoxic in a battery of in vitro tests.

Assessment carcinogenicity - Prothioconazole was not carcinogenic in lifetime feeding studies in rats and mice.

N,N-Dimethyldecanamide is not considered carcinogenic.

Assessment toxicity to reproduction - Prothioconazole caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Prothioconazole is related to parental toxicity.

N,N-Dimethyldecanamide is not considered a reproductive toxicant at non-maternally toxic dose levels.

Assessment developmental toxicity - Prothioconazole caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Prothioconazole are related to maternal toxicity.

N,N-Dimethyldecanamide did not cause developmental toxicity in rats and rabbits. Further

information - No further toxicological information is available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) 4.02 mg/l Exposure time: 96 h

Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) 2.9 mg/l Exposure time: 48 h

Toxicity to aquatic plants IC50 (Raphidocelis subcapitata (freshwater green alga)) 12.7 mg/l Growth rate; Exposure time: 72 h

EC50 (Skeletonema costatum) 0.046 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient prothioconazole.

12.2 Persistence and degradability

Biodegradability Prothioconazole: Not rapidly biodegradable

Koc Prothioconazole: Koc: 1765

12.3 Bioaccumulative potential Prothioconazole: Bioconcentration factor (BCF) 19 Does not bioaccumulate. N,N-

Dimethyldecanamide: Does not bioaccumulate

12.4 Mobility in soil. Prothioconazole: Slightly mobile in soils. N,N-Dimethyldecanamide: Slightly mobile in soil

12.5 Results of PBT and vPvB assessment. Prothioconazole: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

N,N-Dimethyldecanamide: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects. Additional ecological information - No further ecological information is available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product - In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant. Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).

Contaminated packaging - Small containers (< 10 l or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times. Add washings to sprayer at time of filling. Dispose of empty and cleaned packaging safely. Large containers (> 25 l or > 25 kg) should not be rinsed or re-used for any other purpose. Return large containers to supplier. Follow advice on product label and/or leaflet.

Waste key for the unused product 02 01 08* agrochemical waste containing hazardous substances

SECTION 14: TRANSPORT INFORMATION

ADR/RID/ADN	IMDG
14.1 UN number 3082	14.1 UN number 3082
14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROTHIOCONAZOLE SOLUTION)	14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROTHIOCONAZOLE SOLUTION)
14.3 Transport hazard class(es) 9	14.3 Transport hazard class(es) 9
14.4 Packaging Group III	14.4 Packaging Group III
14.5 Environm. Hazardous Mark YES no. 90	14.5 Marine pollutant YES
This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.	

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IATA	UK 'Carriage' Regulations
14.1 UN number 3082	14.1 UN number 3082
14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROTHIOCONAZOLE SOLUTION)	14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROTHIOCONAZOLE SOLUTION)
14.3 Transport hazard class(es) 9	14.3 Transport hazard class(es) 9
14.4 Packaging Group III	14.4 Packaging Group III
14.5 Environm. Hazardous Mark YES	14.5 Environm. Hazardous Mark YES Emergency action code 3Z
	14.6 Special precautions for user See sections 6 to 8 of this Safety Data Sheet.
	14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code. No transport in bulk according to the IBC Code.

SECTION 15: REGULATORY INFORMATION

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

UK and Northern Ireland Regulatory References :-

This material may be subject to some or all of the following regulations (and any subsequent amendments). Users must ensure that any uses and restrictions as indicated on the label and/or leaflet are followed.

Transport :-

Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No 1348)

Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 (SI 1997 No 2367) Air

Navigation Dangerous Goods Regulations 2002 (SI 2002 No 2786)

Supply and Use :-

Chemical (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No 716)

Chemical (Hazard Information and Packaging for Supply) (Northern Ireland) Regulations 2009

Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No 2677)

EH40 Occupational Exposure Limits - Table 1 List of approved workplace exposure limits

Control of Pesticide Regulations 1986

Dangerous Substances and Explosive Atmospheres Regulations 2002

Waste Treatment :-

Environmental Protection Act 1990, Part II Environmental Protection (Duty of Care) Regulations 1991 The Waste Management Licensing Regulations 1994 (as amended) Hazardous Waste Regulations 2005 (Replacing Special Waste Regulations 1996 as amended) Landfill Directive Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94) Water Resources Act 1991 Anti-Pollution Works Regulations 1999

Further information :- WHO-classification: III (Slightly hazardous)

15.2 Chemical safety assessment. A chemical safety assessment is not required.

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SECTION 16: OTHER INFORMATION

Text of the hazard statements mentioned in Section 3 H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.	EN European Standard EU European Union IATA International Air Transport Association IBC International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) ICx Inhibition concentration to x % IMDG International Maritime Dangerous Goods Conc. Concentration LCx Lethal concentration to x % LDx Lethal dose to x % LOEC/LOEL Lowest observed effect concentration/level MARPOL MARPOL: International Convention for the prevention of marine pollution from ships N.O.S. Not otherwise specified NOEC/NOEL No observed effect concentration/level OECD Organization for Economic Co-operation and Development RID Regulations concerning the International Carriage of Dangerous Goods by Rail TWA Time weighted average UN United Nations WHO World health organisation
Abbreviations and acronyms SI Statutory Instrument EH40 WEL Worker Exposure Limit ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways ADR European Agreement concerning the International Carriage of Dangerous Goods by Road ATE Acute toxicity estimate CAS-Nr. Chemical Abstracts Service number ECx Effective concentration to x % EC-No. European community number EINECS European inventory of existing commercial substances ELINCS European list of notified chemical substances	

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.