

CLAYTON PLANT PROTECTION

CLAYTON TENDRIL Safety Data Sheet according to Regulation (EC) No. 1907/2006. Version 1/dsc 27/5/2023.

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

1.1 Product identifier: Product name : Clayton Tendril . Product type : Mixture

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

Relevant identified uses: Fungicide

1.3 Details of the supplier of the safety data sheet:

Clayton Plant Protection Ltd., Bracetown Business Park, Clonee, Dublin15. Ireland.

Tel: (00 353) 1 8210127 www.claytonpp.com Email: info@claytonpp.com

1.4 In the event of an emergency, call the National Poisons Information Centre,

Beaumont Hospital: 01-809-2566 or 01-837-9964

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.

Acute toxicity: Category 4

H302 Harmful if swallowed. Acute toxicity: Category 4

H332 Harmful if inhaled. Skin irritation: Category 2

H315 Causes skin irritation. Eye irritation: Category 2

H319 Causes serious eye irritation.

Specific target organ toxicity - single exposure: Category 3

H335 May cause respiratory irritation.

Specific target organ toxicity - repeated exposure: Category 2

H373 May cause damage to organs (Eyes) through prolonged or repeated exposure.

Reproductive toxicity: Category 2

H361d Suspected of damaging the unborn child.

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
- Spiroxamine
- N,N-Dimethyl decanamide



Signal word: Warning

Hazard statements

H302 + H332 Harmful if swallowed or if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs (Eyes) through prolonged or repeated exposure.

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, Spiroxamine.

May produce an allergic reaction.

Precautionary statements

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P312 Call a POISON CENTRE/doctor/physician if you feel unwell.

P501 Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site, except for triple rinsed empty containers which can be disposed of as non-hazardous waste.

2.3. Other hazards :

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature : Emulsifiable concentrate (EC) Prothioconazole/Spiroxamine 160:300 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	16.3
Spiroxamine	118134-30-8	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT RE 2, H373 Repr. 2, H361d Aquatic Acute 1, H400 Aquatic Chronic 1, H410	30.6
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

Further information

Prothioconazole	178928-70-6	M-Factor: 10 (acute), 1 (chronic)
Spiroxamine	118134-30-8	M-Factor: 100 (acute), 100 (chronic)

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

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 center immediately.

Skin contact : Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.

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. Call a physician or poison control center immediately.

Ingestion : Do NOT induce vomiting. Rinse mouth. Call a physician or poison control center 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 : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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 (NOx)

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

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 the product

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contaminates rivers and lakes or drains inform respective authorities.

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.

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.

Advice on protection against fire and explosion : Keep away from heat and sources of ignition.

Hygiene measures : Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Wash hands immediately after work, if necessary take a shower.

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 freezing. 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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Prothioconazole	178928-70-6	1.4 mg/m ³ (SK-ABS)		
Spiroxamine	118134-30-8	0.6 mg/m ³ (SK-SEN)		

8.2 Exposure controls

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. 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 Liquid, clear to slightly turbid

Colour yellow to brown

Odour aromatic

pH 6.0 - 8.0 (1 %) (23 °C) (deionized water)

Flash point 139 °C

Ignition temperature 315 °C

Density ca. 0.98 g/cm³ (20 °C)

Water solubility emulsifiable

Partition coefficient: n-octanol/water Prothioconazole: log Pow: 3.82 (20 °C) (pH 7)

Spiroxamine: log Pow: 2.8 - 3.0 (20 °C) (pH 7)

N,N-Dimethyldecanamide: log Pow: 2.46

Oxidizing properties No oxidizing properties

Explosivity Not explosive 92/69/EEC, A.14 / OECD 113

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

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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) > 500 - < 1,000 mg/kg

Acute inhalation toxicity LC50 (Rat) ca. 2.212 mg/l Exposure time: 4 h Irritating to respiratory system.

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

Skin corrosion/irritation Irritating to skin. (Rabbit)

Serious eye damage/eye irritation Irritating to eyes. (Rabbit)

Respiratory or skin sensitisation Non-sensitizing. (Guinea pig) OECD Test Guideline 406, Magnusson & Kligman test

Assessment STOT Specific target organ toxicity – single exposure

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

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

N,N-Dimethyldecan-1-amide: May cause respiratory irritation.

Assessment STOT Specific target organ toxicity – repeated exposure: Prothioconazole did not cause specific target organ toxicity in experimental animal studies. Spiroxamine caused specific target organ toxicity in experimental animal studies in dogs in the following organ(s): Eyes. N,N-Dimethyldecanamide did not cause specific target organ toxicity in experimental animal studies.

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. Spiroxamine was not mutagenic or genotoxic 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. Spiroxamine 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. Spiroxamine 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 Spiroxamine 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. Spiroxamine caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Spiroxamine are related to maternal toxicity. N,N-Dimethyldecanamide did not cause developmental toxicity in rats and rabbits.

Aspiration hazard : Based on available data, the classification criteria are not met. Further information No further toxicological information is available.

11.2 Information on other hazards

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) 6.57 mg/l Exposure time: 96 h Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) 6.3 mg/l Exposure time: 48 h

Toxicity to aquatic plants IC50 (Raphidocelis subcapitata (freshwater green alga)) 0.16 mg/l Growth rate; Exposure time: 72 h ErC50 (Skeletonema costatum) 0.03278 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient prothioconazole. EC10 (Skeletonema costatum) 0.01427 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 Spiroxamine: Not rapidly biodegradable N,N-Dimethyldecanamide: rapidly biodegradable Koc Prothioconazole: Koc: 1765 Spiroxamine: Koc: 2415

12.3 Bioaccumulative potential

Bioaccumulation Prothioconazole: Bioconcentration factor (BCF) 19 Does not bioaccumulate. Spiroxamine: Bioconcentration factor (BCF) 87 Does not bioaccumulate. N,N-Dimethyldecanamide: Does not bioaccumulate.

12.4 Mobility in soil Mobility in soil

Prothioconazole: Slightly mobile in soils

Spiroxamine: Slightly mobile in soils

N,N-Dimethyldecanamide: Slightly mobile in soils

12.5 Results of PBT and vPvB assessment PBT and vPvB assessment

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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).

Spiroxamine: 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 Endocrine disrupting properties

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Additional ecological information : No other effects to be mentioned

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product : It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines.

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. 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

ADR/RID/ADN

14.1 UN number 3082

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SPIROXAMINE SOLUTION)

14.3 Transport hazard class(es) 9

14.4 Packaging Group III

14.5 Environm. Hazardous Mark YES Hazard no. 90

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

IMDG

14.1 UN number 3082

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SPIROXAMINE SOLUTION)

14.3 Transport hazard class(es) 9

14.4 Packaging Group III

14.5 Marine pollutant YES

IATA

14.1 UN number 3082

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SPIROXAMINE SOLUTION)

14.3 Transport hazard class(es) 9

14.4 Packaging Group III

14.5 Environm. Hazardous Mark YES

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 Republic of Ireland Regulations

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.

Supply and Use : European Communities (Prohibition of Certain Active Substances in Plant Protection Products) Regulations 1981 (SI No 320/1981) European Communities (Authorization, Placing on the Market, Use and Control of Plant Protection Products) Regulations 2003 (SI No 83/2003) European Communities (Classification, Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations 2001 (SI No 624/2001 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001 (SI No 619/2001)

Waste Treatment Landfill Directive Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94)

Further information WHO-classification: II (Moderately 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

H302 Harmful if swallowed. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. 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. Abbreviations and acronyms 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 Conc. Concentration EC-No. European community number ECx Effective concentration to x % EINECS European inventory of existing commercial substances ELINCS European list of notified chemical substances ELV Exposure Limit Value 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 LCx Lethal concentration to x % LDx Lethal dose to x % LOEC/LOEL Lowest observed effect concentration/level 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 SI Statutory Instrument TWA Time weighted average UN United Nations WHO World health organisation

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.

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