

CLAYTON PLANT PROTECTION

CLAYTON GEAR Safety Data Sheet according to Regulation (EC) No. 1907/2006 and Regulation (EU) No. 453/2010. Version 1/dsc 02/10/2015. This version replaces all previous versions.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY OR UNDERTAKING

1.2 Product identifier Product name : CLAYTON GEAR

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

1.3 Details of the supplier of the safety data sheet

Company Clayton Plant Protection (UK) Ltd., Bracetown Business Park, Clonee, Dublin15. Ireland.
Tel: (00 353) 1 8210127 www.cpp.ag Email: info@cpp.ag

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EU) 1272/2008

Skin sensitization - Sub-category 1A - H317

Acute Aquatic toxicity - Category 1 - H400

Chronic Aquatic toxicity - Category 1 - H410

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

Classification according to EU Directives 67/548/EEC or 1999/45/EC


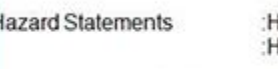
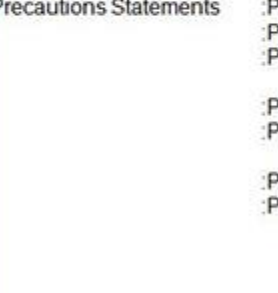

Xi - Irritant N - Dangerous for the environment

R43 - May cause sensitization by skin contact

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms		
	Signal Word	: Warning
	Hazard Statements	:H317 May cause an allergic skin reaction. :H410 Very toxic to aquatic life with long lasting effects
	Precautions Statements	:P102 Keep out of reach of children :P273 Avoid release to the environment. :P280 Wear protective gloves/protective clothing/eye protection/face protection :P302/P352 IF ON SKIN: Wash with plenty of soap and water. :P313/P333 If skin irritation or rash occurs: Get medical advice/attention. :P391 Collect spillage :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.
	Supplemental Information	:EUH401 To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label: · cyprodinil

2.3 Other hazards : May form flammable dust air mixture.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS No. EC No. Registration Number	Classification (67/548/EEC)	Classification (REGULATION (EC) No. 1272/2008)	Concentration
cyprodinil	121552-61-2	Xi, N R43 R50/53	Skin Sens.1B; H317 Aquatic Acute1; H400 Aquatic Chronic1; H410	37.5 % w/w
fludioxonil	131341-86-1	N R50/53	Aquatic Acute1; H400 Aquatic Chronic1; H410	25 % w/w
silica	91053-39-3 688855-54-9 61790-53-2 7631-86-9 293-303-4	-	-	10 – 15 % w/w
Sodium dibutyl-naphthalene sulphonate	25417-20-3 246-960-6	Xn R20/22 R36/38 R52/53	Acute Tox.4; H302 Acute Tox.4; H332 Skin Irrit.2; H315 Eye Irrit.2; H319 Aquatic Chronic3; H412	0 – 5 % w/w

Substances for which there are Community workplace exposure limits.

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For the full text of the R-phrases mentioned in this Section, see Section 16.
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 : Have the product container, label or Material Safety Data Sheet with you when calling a poison control centre or physician, or going for treatment.

Inhalation : Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.

Skin Contact : Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

Eye Contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available

4.3 Indication of any immediate medical attention and special treatment needed

Medical advice : There is no specific antidote available. Treat symptomatically.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media Extinguishing media - small fires Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Extinguishing media - large fires Use alcohol-resistant foam or water spray.

Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture Fire will spread by burning with a visible flame. As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.

5.3 Advice for fire-fighters: Wear full protective clothing and self-contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures. Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13). Do not create a powder cloud by using a brush or compressed air. Clean contaminated surface thoroughly. If the product contaminates rivers and lakes or drains inform respective authorities.

6.4 Reference to other sections Refer to protective measures listed in sections 7 and 8. Refer to disposal considerations listed in section 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling. This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents. This material can become readily charged in most operations. Avoid contact with skin and eyes. When using, do not eat, drink or smoke. For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities No special storage conditions required. Keep containers tightly closed in a dry, cool and well ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs.

7.3 Specific end use(s) Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
cyprodinil	7 mg/m ³	8 h TWA	SYNGENTA
fludioxonil	10 mg/m ³	8 h TWA	SYNGENTA
kieselguhr	4 mg/m ³ (Respirable dust)	8 h TWA	DFG
	4 mg/m ³ (Respirable dust)	8 h TWA	SUVA
	10 mg/m ³	8 h TWA	ACGIH
	3,000 ppm	IDLH	NIOSH
	1.2 mg/m ³ (respirable dust)	8 h TWA	UKHSE

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

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8.2 Exposure controls

Engineering Measures : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.

Protective measures : The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.

Respiratory protection : No personal respiratory protective equipment normally required. A particulate filter respirator may be necessary until effective technical measures are installed.

Hand protection : Chemical resistant gloves are not usually required. Select gloves based on the physical job requirements.

Eye Protection : Eye protection is not usually required. Follow any site specific eye protection policies.

Skin and body protection : No special protective equipment required. Select skin and body protection based on the physical job requirements.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State : Solid Form : Granules Colour : Grey to brown Odour : Weak Odour Threshold : No data available pH : 8 – 11 at 10 g/l Melting point/range : No data available Boiling point/boiling range : No data available Flash point : No data available Evaporation rate : No data available Flammability (solid, gas) : Not highly flammable Lower explosion limit : No data available	Upper explosion limit : No data available Vapour pressure : No data available Relative vapour density : No data available Density : No data available Solubility in other solvents : Not soluble Partition Coefficient n-octanol/water : No data available Autoignition temperature : No data available Thermal decomposition : No data available Viscosity, dynamic : No data available Viscosity, kinematic : No data available Explosive properties : Not explosive Oxidizing properties : Not oxidising
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9.2 Other information

Minimum ignition temperature : 675 °C Dust explosion class : Forms flammable dust clouds Minimum ignition energy : 0.03 – 0.1 J	Bulk density : 0.537 g/cm ³ Burning number : 3 at 20 °C 5 at 100 °C
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SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity : No information available

10.2 Chemical Stability : No information available

10.3 Possibility of hazardous reactions : None known. Hazardous polymerisation does not occur.

10.4 Conditions to avoid : No information available

10.5 Incompatible materials : No information available

10.6 Hazardous decomposition products : Combustion or thermal decomposition will evolve toxic and irritant vapours.

SECTION 11. ECOLOGICAL INFORMATION

Acute oral toxicity : LD50 male and female rat, > 5,000 mg/kg

Acute inhalational toxicity : LC50 male and female rat, > 2.51 mg/l, 4 h

Acute dermal toxicity : LD50 male and female rat, > 2,000 mg/kg

Skin corrosion/irritation : Rabbit: non-irritating

Serious eye damage/eye irritation : Rabbit: non-irritating

Respiratory or skin sensitisation : Guinea pig: not a skin sensitiser in animal tests

Germ cell mutagenicity cyprodinil : Did not show mutagenic effects in animal experiments.

fludioxonil : Did not show mutagenic effects in animal experiments.

Carcinogenicity cyprodinil : Did not show carcinogenic effects in animal experiments.

fludioxonil : Did not show carcinogenic effects in animal experiments.

Teratogenicity cyprodinil : Did not show teratogenic effects in animal experiments.

Reproductive toxicity cyprodinil : Did not show reproductive toxicity effects in animal experiments.

fludioxonil : Did not show reproductive toxicity effects in animal experiments.

STOT – repeated exposure cyprodinil : No adverse effect has been observed in chronic toxicity tests.

fludioxonil : No adverse effect has been observed in chronic toxicity tests.

SECTION 12. TOXICOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish : LC50 *Oncorhynchus mykiss* (rainbow trout), 3.1 mg/l, 96 h

Toxicity to aquatic invertebrates : EC50 *Daphnia magna* (water flea), 0.14 mg/l, 48 h

Toxicity to aquatic plants : EbC50 *Desmodesmus subspicatus* (green algae), 0.6 mg/l, 72 h ErC50 *Desmodesmus subspicatus* (green algae), 1.6 mg/l, 72 h

12.2 Persistence and degradability



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Biodegradability : Neither cyprodinil or fludioxonil are readily biodegradable

Stability in water : cyprodinil : Degradation half life: ca 10 d. Not persistent in water

fludioxonil : Degradation half life: 450 - 700 d. Fludioxonil is stable in water

Stability in soil : cyprodinil : Degradation half life: 0.1 – 2 d. Not persistent in soil fludioxonil : Degradation half life: 14 d. Not persistent in soil

12.3 Bioaccumulative potential : Cyprodinil : Does not bioaccumulate

Fludioxonil : Does not bioaccumulate

12.4 Mobility in soil : cyprodinil : Low to very slight mobility in soil

Fludioxonil : Immobile in soil

12.5 Results of PBT and vPvB assessment

Cyprodinil, fludioxonil : These substances are not considered to be persistent, bioaccumulating nor toxic (PBT). These substances are not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

Classification of the product is based on the summation of the concentrations of classified components.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product : Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Land transport (ADR/RID)		
14.1	UN Number	: UN 3077
14.2	UN proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CYPRODINIL AND FLUDIOXONIL)
14.3	Transport hazard class(es)	: 9
14.4	Packing Group	: III
Labels : 9		
14.5	Environmental hazards	: Environmentally hazardous
Sea transport (IMDG)		
14.1	UN Number	: UN 3077
14.2	UN proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CYPRODINIL AND FLUDIOXONIL)
14.3	Transport hazard class(es)	: 9
14.4	Packing Group	: III
Labels : 9		
14.5	Environmental hazards	: Marine pollutant
Air transport (IATA-DGR)		
14.1	UN Number	: UN 3077
14.2	UN proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CYPRODINIL AND FLUDIOXONIL)
14.3	Transport hazard class(es)	: 9
14.4	Packing Group	: III
Labels : 9		
14.6	Special precautions for user	: None


14.6 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
GHS-Labeling

Hazard pictograms	
	
Signal Word	: Warning
Hazard Statements	:H317 May cause an allergic skin reaction. :H410 Very toxic to aquatic life with long lasting effects
Precautions Statements	:P102 Keep out of reach of children :P273 Avoid release to the environment. :P280 Wear protective gloves/protective clothing/eye protection/face protection :P302/P352 IF ON SKIN: Wash with plenty of soap and water. :P313/P333 If skin irritation or rash occurs: Get medical advice/attention. :P391 Collect spillage :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.
Supplemental Information	:EUH401 To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label: cyprodinil

15.2 Chemical Safety Assessment : A Chemical Safety Assessment is not required for this substance.

SECTION 16. OTHER INFORMATION

Approval number: MAPP 17169

Use plant protection products safely. Always read the label and product information before use.

Full text of R-phrases referred to under sections 2 and 3:

R20/22 - Harmful by inhalation and if swallowed

R36/38 - Irritating to eyes and skin

R4 -3 May cause sensitisation by skin contact

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3.

H302 - Harmful if swallowed

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

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

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.