CLAYTON PLANT PROTECTION
CLAYTON PATRIOT Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 1/dsc 20/2/2018
This version replaces all previous versions

SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier CLAYTON PATRIOT
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 in UK
Clayton Plant Protection (UK)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.
H411 Hazardous to the aquatic environment — Chronic Hazard, Category 2
Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects: 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.

Pictogram:

CLP Signal Word: -

Hazard statements (CLP)
H411 - Toxic to aquatic life with long lasting effects
Precautionary statements (CLP) :
P102 - Keep out of reach of children
P234 - Keep only in original container
P270 - Do not eat, drink or smoke when using this product
P273 - Avoid release to the environment
P391 - Collect spillage
P501 - Dispose of contents/container to Collection point
EUH-statements :
EUH401 - To avoid risks to human health and the environment, comply with the instructions for use
Extra phrases :
SP 1 Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads)
2.3. Other hazards - No additional information available

SECTION 3: Composition/information on ingredients
3.1. Substances Not applicable
3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Pyrimethanil	(CAS-No.) 53112-28-0 (EC Index-No.) 612-240-00-9	37	Aquatic Chronic 2, H411
PROPYLENE GLYCOL substance with national workplace exposure limit(s) (GB, IE, LT, LV)	(CAS-No.) 57-55-6 (EC-No.) 200-338-0 (REACH-no) 01-2119456809-23	< 10	Not classified
1,2-benzisothiazol-3(2H)-one	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9 (EC Index-No.) 613-088-00-6	< 0.5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

Specific concentration limits:

Name	Product identifier	Specific concentration limits
1,2-benzisothiazol-3(2H)-one	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9 (EC Index-No.) 613-088-00-6	(C >= 0.05) Skin Sens. 1, H317

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. IF INHALED: if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration. In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. If skin irritation occurs: Get medical advice/attention. Wash skin with plenty of water.

First-aid measures after eye contact : Rinse immediately with plenty of water, also under the eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice and attention. Rinse eyes with water as a precaution.

First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Get immediate medical advice and attention. Call a poison centre or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed : No additional information available

4.3. Indication of any immediate medical attention and special treatment needed : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : AFFF foam. dry chemical powder. Carbon dioxide (CO2). Water fog. Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters.

Protection during firefighting : Wear suitable protective clothing. In case of inadequate ventilation wear respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel Emergency procedures : Ventilate spillage area. Evacuate the danger area. Provide adequate ventilation to minimize dust and/or vapour concentrations. Consult an expert. Eliminate every possible source of ignition.

6.1.2. For emergency responders Protective equipment : Do not attempt to take action without suitable protective equipment. Wear self-contained breathing apparatus, rubber boots and thick rubber gloves. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions Avoid release to the environment. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Prevent liquid from entering sewers, watercourses, underground or low areas. Impound and recover large spill by mixing it with inert granular solids. Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Clean up any spills as soon as possible, using an absorbent material to collect it.

Other information : Avoid spilling the product, as this might cause falls. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections Exposure controls/personal protection. Disposal considerations. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Handle in accordance with good industrial hygiene and safety procedures. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not allow to enter into surface water or drains.

Handling temperature : Store at room temperature

Hygiene measures : Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of direct sunlight. Store in a well-ventilated place. Keep cool.

Maximum storage period : 2 year(s)

Storage temperature : > 0 °C 7.3.

Specific end use(s) No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PROPYLENE GLYCOL (57-55-6. United Kingdom Local name Propane-1,2-diol
United Kingdom WEL TWA (mg/m³) 10 mg/m³ particulates 474 mg/m³ total vapour and particulates
United Kingdom WEL TWA (ppm) 150 ppm total vapour and particulates

8.2. Exposure controls

Appropriate engineering controls: Ensure good ventilation of the work station.
Hand protection: Protective gloves
Eye protection: Face shield. Chemical goggles or safety glasses. Safety glasses
Skin and body protection: Wear suitable protective clothing
Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment
Environmental exposure controls: Notify authorities if product enters sewers or public waters. Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : white. Odour : Low. Odour threshold : No data available pH : 5.8 Relative evaporation rate (butylacetate=1) : No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available Flash point : > 110 °C Auto-ignition temperature : > 600 °C	Decomposition temperature : No data available Flammability (solid, gas) : Not applicable Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density : No data available Density : 1.08 g/ml (20°C) Solubility : No data available Log Pow : No data available Viscosity, kinematic : No data available Viscosity, dynamic : 799 cP (25°C) Explosive properties : Product is not explosive. Oxidising properties : No data available Explosive limits : No data available

9.2. Other information No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity When exposed to heat, may decompose liberating hazardous gases.
10.2. Chemical stability Stable under normal conditions of use.
10.3. Possibility of hazardous reactions None under normal conditions.
For further information, refer to section 10 : "Stability and Reactivity".
10.4. Conditions to avoid Keep out of direct sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
10.5. Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.
10.6. Hazardous decomposition products When heated to decomposition, emits dangerous fumes. Carbon dioxide (CO2). Carbon monoxide. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

PYRUS 400 SC	LD50 oral rat > 2000 mg/kg LD50 dermal rat > 2000 mg/kg LC50 inhalation rat (mg/l) > 2.6 mg/l/4h
Pyrimethanil (53112-28-0)	LD50 oral rat 4149 mg/kg male LD50 dermal rat > 5000 mg/kg LC50 inhalation rat (mg/l) > 1.98 mg/l/4h
PROPYLENE GLYCOL (57-55-6)	LD50 oral rat > 2000 mg/kg LD50 dermal rabbit > 2000 mg/kg
1,2-benzisothiazol-3(2H)-one (2634-33-5)	LD50 oral 670 mg/kg

Skin corrosion/irritation : Not classified pH: 5.8
Serious eye damage/irritation : Not classified pH: 5.8
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

PYRUS 400 SC - Viscosity, kinematic - 739.81481481 mm²/s

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

PYRUS 400 SC LC50 fish 1 61.7 mg/l (96h) EC50 Daphnia 1 8.22 mg/l (48h) ErC50 (algae) 44.5 mg/l (72h)

Pyrimethanil (53112-28-0) LC50 fish 1 10.56 mg/l (96h Salmo gairdneri) EC50 Daphnia 1 2.9 mg/l (48h Daphnia magna) ErC50 (algae) 5.84 mg/l (96h Green algae) NOEC chronic crustacea 0.94 mg/l (21d Daphnia magna)

PROPYLENE GLYCOL (57-55-6) LC50 fish 1 > 100 mg/l EC50 Daphnia 1 > 100 mg/l ErC50 (algae) > 100 mg/l 1,2-benzisothiazol-3(2H)-one (2634-33-5) LC50 fish 1 1.3 mg/l EC50 Daphnia 1 0.99 mg/l ErC50 (algae) 0.084 mg/l NOEC chronic fish 0.74 mg/l NOEC chronic crustacea 0.7 mg/l NOEC chronic algae 0.043 mg/l

12.2. Persistence and degradability

Pyrimethanil (53112-28-0) Persistence and degradability May cause long-term adverse effects in the environment.

PROPYLENE GLYCOL (57-55-6) Biochemical oxygen demand (BOD) 0.86 g O_2/g substance BOD5 Chemical oxygen demand (COD) 1.585 g O_2/g substance

12.3. Bioaccumulative potential

Pyrimethanil (53112-28-0) Bioaccumulative potential Not established.

PROPYLENE GLYCOL (57-55-6) Log Pow -1

12.4. Mobility in soil

PYRUS 400 SC Surface tension 51.33 mN/m (25°C)

Pyrimethanil (53112-28-0) Surface tension 61.51 mN/m (20°C; 90%)

12.5. Results of PBT and vPvB assessment No additional information available

12.6. Other adverse effects No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods : Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number 3082

14.2. UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S...

Transport document description UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Pyrimethanil), 9, III, (E) MARINE POLLUTANT

14.3. Transport hazard class(es) 9

	ADR	IMDG	IATA	AND	RID
14.4. Packing group	III	III	III	III	III
14.5 Environmental hazards	Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
	No supplementary information available				

14.6. Special precautions for user –

Overland transport

Classification code (ADR) : M6
Special provisions (ADR) : 274, 335, 375, 601
Limited quantities (ADR) : 5l
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P001, IBC03, LP01, R001
Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions (ADR) : TP1, TP29
Tank code (ADR) : LGBV
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13
Hazard identification number (Kemler No.) : 90
Orange plates :

90
3082

Tunnel restriction code : E
EAC code : •3Z –

Transport by sea
Special provisions (IMDG) : 274, 335
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP2, TP29
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A

Air transport
PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L
Special provisions (IATA) : A97, A158
ERG code (IATA) : 9L

Inland waterway transport
Classification code (ADN) : M6
Special provisions (ADN) : 274, 335, 601
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP
Number of blue cones/lights (ADN) : 0

Rail transport
Classification code (RID) : M6
Special provisions (RID) : 274, 335, 601
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions (RID) : TP1, TP29
Tank codes for RID tanks (RID) : LGBV
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW31
Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 90

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	PYRUS 400 SC
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	1,2-benzisothiazol-3(2H)-one
3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	PYRUS 400 SC - 1,2-benzisothiazol-3(2H)-one - Pyrimethanil

Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations : No additional information available
15.2. Chemical safety assessment : No chemical safety assessment has been carried out

SECTION 16: Other information
Full text of H- and EUH-statements:
Acute Tox. 4 (Oral) Acute toxicity (oral), Category 4
Aquatic Acute 1 Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1 Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2 Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1 Serious eye damage/eye irritation, Category 1
Skin Irrit. 2 Skin corrosion/irritation, Category 2
Skin Sens. 1 Skin sensitisation, Category 1
H302 Harmful if swallowed
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects
H411 Toxic to aquatic life with long lasting effects
EUH401 To avoid risks to human health and the environment, comply with the instructions for use
Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]: Aquatic Chronic 2 H411 Calculation method

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.