CLAYTON PLANT PROTECTION
CLAYTON SPIGOT Safety Data Sheet according to Regulation (EU) No. 453/2010. RevisedDSC 29/04/2019
This version replaces all previous versions

SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier CLAYTON SPIGOT
1.2. Relevant identified uses of the substance or uses advised against : Crop protection product, fungicide
1.3. Details of the supplier of the safety data sheet
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
According to Regulation (EC) No 1272/2008 [CLP]
Acute Tox. 4 (Inhalation - vapour). Skin Corr./Irrit. 2 Repr. 2 (unborn child)
Aquatic Acute 1 Aquatic Chronic 1
H315, H332, H361d, H400, H410, EUH401
For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements
Globally Harmonized System (GHS) in accordance with UK regulations.

Pictogram:

Signal Word: Warning

Hazard Statement:
H315 Causes skin 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.
EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary Statement:
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.

Precautionary Statements (Prevention):
P201 Obtain special instructions before use.
P261 Avoid breathing spray.
P264 Wash contaminated body parts thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves and eye/face protection.

Precautionary Statements (Response):
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P312 Call a POISON CENTRE or doctor/physician if you feel unwell.
P361 Take off immediately all contaminated clothing.
P391 Collect spillage.
P332 + P313 If skin irritation occurs: Get medical advice/attention.

Precautionary Statements (Storage):
P405 Store locked up.

Precautionary Statements (Disposal):
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.

According to Regulation (EC) No 1272/2008 [CLP]
Hazard determining component(s) for labelling: FENPROPIMORPH, CYCLOHEXANONE
2.3. Other hazards
According to Regulation (EC) No 1272/2008 [CLP]
See section 12 - Results of PBT and vPvB assessment.
If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

SECTION 3: Composition/Information on Ingredients
3.1. Substances : Not applicable
3.2. Mixtures
Chemical nature : crop protection product, fungicide, Emulsifiable Concentrate (EC)
Hazardous ingredients (GHS) : according to Regulation (EC) No. 1272/2008

fenpropimorph; cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6-dimethylmorpholine	Content (W/W): 79.8 % CAS Number: 67564-91-4 EC-Number: 266-719-9	Acute Tox. 4 (oral) Skin Corr./Irrit. 2 Repr. 2 (unborn child) Aquatic Chronic 2 H302, H315, H361d, H411
Cyclohexanone	Content (W/W): < 20 % CAS Number: 108-94-1 EC-Number: 203-631-1 REACH registration number: 01-2119453616-35 INDEX-Number: 606-010-00-7	Flam. Liq. 3 Acute Tox. 4 (Inhalation - vapour) Acute Tox. 4 (oral) Acute Tox. 4 (dermal) Skin Corr./Irrit. 2 Eye Dam./Irrit. 1 H226, H318, H315, H312, H332, H302
2-methylpropan-1-ol; iso-butanol	Content (W/W): < 5 % CAS Number: 78-83-1 EC-Number: 201-148-0 REACH registration number: 01-2119484609-23 INDEX-Number: 603-108-00-1	Flam. Liq. 3 Skin Corr./Irrit. 2 Eye Dam./Irrit. 1 STOT SE 3 (drowsiness and dizziness) STOT SE 3 (irr. to respiratory syst.) H226, H318, H315, H336, H335

For the classifications not written out in full in this section, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, the full text is listed in section 16.

SECTION 4: First-Aid Measures
4.1. Description of first aid measures
Show container, label and/or safety data sheet to physician.
Remove contaminated clothing.
If inhaled: Keep patient calm, remove to fresh air, seek medical attention.
On skin contact: Wash thoroughly with soap and water.
On contact with eyes: Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.
On ingestion: Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11. Further important symptoms and effects are so far not known.
4.3. Indication of any immediate medical attention and special treatment needed
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5: Fire-Fighting Measures
5.1. Extinguishing media
Suitable extinguishing media: foam, dry powder, carbon dioxide, water spray
5.2. Special hazards arising from the substance or mixture
Carbon monoxide, carbon dioxide, nitrogen oxides, sulphur oxides. The substances/groups of substances mentioned can be released in case of fire.
5.3. Advice for fire-fighters
Special protective equipment: Wear self-contained breathing apparatus and chemical-protective clothing.
Further information: Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

SECTION 6: Accidental Release Measures
6.1. Personal precautions, protective equipment and emergency procedures
Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.
6.2. Environmental precautions
Do not allow contamination of public drains or surface or ground waters. Inform local water plc if spillage enters drains and the Environment Agency (England & Wales), the Scottish Environmental Protection Agency (Scotland), or the Environment and Heritage Service (Northern Ireland) if it enters surface or ground waters. Keep people and animals away.
6.3. Methods and material for containment and cleaning up
For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).
For large amounts: Dike spillage. Pump off product.

Cleaning operations should be carried out only while wearing breathing apparatus. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labelled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.
6.4. Reference to other sections : Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage
7.1. Precautions for safe handling
No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Protection against fire and explosion: Vapours may form ignitable mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.
7.2. Conditions for safe storage, including any incompatibilities
Segregate from foods and animal feeds. Further information on storage conditions: Keep away from heat. Protect from direct sunlight.
7.3. Specific end use(s)
For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

SECTION 8: Exposure Controls/Personal Protection
8.1. Control parameters ; Components with occupational exposure limits

78-83-1: 2-methylpropan-1-ol; iso-butanol	TWA value 154 mg/m3 ; 50 ppm (WEL/EH 40 (UK)) STEL value 231 mg/m3 ; 75 ppm (WEL/EH 40 (UK))
108-94-1: cyclohexanone	STEL value 82 mg/m3 ; 20 ppm (WEL/EH 40 (UK)) TWA value 41 mg/m3 ; 10 ppm (WEL/EH 40 (UK)) Skin Designation (WEL/EH 40 (UK)) The substance can be absorbed through the skin. TWA value 40.8 mg/m3 ; 10 ppm (OEL (EU)) indicative STEL value 81.6 mg/m3 ; 20 ppm (OEL (EU)) indicative Skin Designation (OEL (EU)) The substance can be absorbed through the skin.

Refer to the current edition of HSE Guidance Note EH40 Occupational Exposure Limits (United Kingdom). For normal use and handling refer to the product label/leaflet. In all other cases the following apply.
8.2. Exposure controls
Personal protective equipment
Respiratory protection: Suitable respiratory protection for higher concentrations or long-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).
Hand protection: Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other
Eye protection: Safety glasses with side-shields (frame goggles) (e.g. EN 166)
Body protection: Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).
General safety and hygiene measures : The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Avoid contact with the skin, eyes and clothing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

SECTION 9: Physical and Chemical Properties
9.1. Information on basic physical and chemical properties

Form	liquid
Colour	light yellow
Odour	aromatic
Odour threshold:	Not determined since harmful by inhalation.
pH value	approx. 8 - 9(water, 1 %(m), 20 °C)(pH Meter)
crystallization temperature:	-15.2 °C (measured)
Boiling point:	The substance / product decomposes therefore not determined. The data given are those of the active ingredient.
Flash point:	61 °C (Directive 92/69/EEC, A.9)
Evaporation rate:	not applicable
Flammability:	not highly flammable
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Ignition temperature:	260 °C (Directive 92/69/EEC, A.15)
Vapour pressure	approx. 0.000039 mbar (20 °C) The data given are those of the active ingredient.
Density	approx. 0.94 g/cm3 (20 °C) (OECD Guideline 109)
Relative vapour density (air):	not determined
Solubility in water:	Emulsifiable
Partitioning coefficient n-octanol/water (log Kow):	not applicable
Thermal decomposition	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic	approx. 79 mPa.s (20 °C) (OECD 114)
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties.
Fire promoting properties	Based on its structural properties the product is not classified as oxidizing.

9.2. Other information
Other Information: If necessary, information on other physical and chemical parameters is indicated in this section.

SECTION 10: Stability and Reactivity
10.1. Reactivity : No hazardous reactions if stored and handled as prescribed/indicated.
10.2. Chemical stability : The product is stable if stored and handled as prescribed/indicated.
10.3. Possibility of hazardous reactions : No hazardous reactions if stored and handled as prescribed/indicated.
10.4. Conditions to avoid : See MSDS section 7 - Handling and storage.
10.5. Incompatible materials : Substances to avoid: strong oxidizing agents, strong bases, strong acids
10.6. Hazardous decomposition products : Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information
11.1. Information on toxicological effects
Acute toxicity
Assessment of acute toxicity: Of moderate toxicity after short-term inhalation. Of low toxicity after single ingestion. Of low toxicity after short-term skin contact.
Experimental/calculated data: LD50 rat (oral): 3,431 mg/kg
The statement for acute oral toxicity was derived from products of similar composition.
LC50 rat (by inhalation): 2.7 mg/l 4 h. The statement for acute inhalative toxicity was derived from products of similar composition. An aerosol was tested.
LD50 rat (dermal): 4,747 mg/kg The statement for acute dermal toxicity was derived from products of similar composition.
Irritation
Assessment of irritating effects: Skin contact causes irritation. Not irritating to the eyes.
Experimental/calculated data:
Skin corrosion/irritation rabbit: Irritant. (OECD Guideline 404)
Serious eye damage/irritation rabbit: non-irritant (Draize test)
Respiratory/Skin sensitization
Assessment of sensitization: There is no evidence of a skin-sensitizing potential.
Experimental/calculated data: modified Buehler test guinea pig: Skin sensitizing effects were not observed in animal studies. (OECD Guideline 406)
Germ cell mutagenicity
Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.
Carcinogenicity
Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.
Reproductive toxicity
Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.
Developmental toxicity
Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.
Information on: fenpropimorph; cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6-dimethylmorpholine
Assessment of teratogenicity: Indications of possible developmental toxicity/teratogenicity were seen in animal studies.
Specific target organ toxicity (single exposure)
Assessment of STOT single:
The available information is not sufficient for the evaluation of specific target organ toxicity.
Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)
Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. No substance-specific organtoxicity was observed after repeated administration to animals.
Aspiration hazard
No aspiration hazard expected. The product has not been tested. The statement has been derived from the properties of the individual components.
Other relevant toxicity information - Misuse can be harmful to health.

SECTION 12: Ecological Information
12.1. Toxicity
Assessment of aquatic toxicity:
Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
Toxicity to fish:
LC50 (96 h) 2.2 mg/l, Oncorhynchus mykiss (OECD 203; ISO 7346; 84/449/EEC, C.1, Flow through.)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Aquatic invertebrates:
EC50 (48 h) 1.5 mg/l, Daphnia magna (Directive 84/449/EEC, C.2, static) The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Aquatic plants:
EC50 (96 h) 0.61 mg/l (growth rate), Desmodesmus subspicatus The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. No observed effect concentration (72 h) 0.037 mg/l (growth rate), Scenedesmus subspicatus The product has not been tested. The statement has been derived from the properties of the individual components.
Chronic toxicity to fish: No observed effect concentration (49 d) 0.0026 mg/l, Oncorhynchus mykiss
Chronic toxicity to aquatic invertebrates: No observed effect concentration (21 d) 0.032 mg/l, Daphnia magna
12.2. Persistence and degradability
Assessment biodegradation and elimination (H2O):
The product has not been tested. The statement has been derived from the properties of the individual components.
Information on: fenpropimorph; cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6-dimethylmorpholine
Assessment biodegradation and elimination (H2O):
Not readily biodegradable (by OECD criteria).
12.3. Bioaccumulative potential
Assessment bioaccumulation potential: The product has not been tested. The statement has been derived from the properties of the individual components.
Information on: fenpropimorph (ISO); cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6dimethylmorpholine
Bioaccumulation potential: Bioconcentration factor: 1,169 - 1,220, Oncorhynchus mykiss (OECD-Guideline 305)
Significant accumulation in organisms is not to be expected.
12.4. Mobility in soil
Assessment transport between environmental compartments:
The product has not been tested. The statement has been derived from the properties of the individual components.
Information on: fenpropimorph; cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6-dimethylmorpholine
Assessment transport between environmental compartments: Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

12.5. Results of PBT and vPvB assessment : The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.
12.6. Other adverse effects : The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.
12.7. Additional information : Other ecotoxicological advice: Do not discharge product into the environment without control.

SECTION 13: Disposal Considerations
13.1. Waste treatment methods
Must be sent to a suitable incineration plant, observing local regulations. The UK Environmental Protection (Duty of Care) Regulations (EP) and amendments should be noted (United Kingdom). This product and any uncleaned containers must be disposed of as hazardous waste in accordance with the 2005 Hazardous Waste Regulations and amendments (United Kingdom). Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

SECTION 14: Transport Information

Land transport ADR RID	UN number UN3082 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains FENPROPIMORPH) Transport hazard class(es): 9, EHSM Packing group: III Environmental hazards: yes Special precautions for user: Tunnel code: E UN number UN3082 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains FENPROPIMORPH) Transport hazard class(es): 9, EHSM Packing group: III Environmental hazards: yes Special precautions for user: None known
Inland waterway transport ADN	UN number UN3082 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains FENPROPIMORPH) Transport hazard class(es): 9, EHSM Packing group: III Environmental hazards: yes Special precautions for user: None known Transport in inland waterway vessel: Not evaluated
Sea transport IMDG	UN number: UN 3082 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains FENPROPIMORPH) Transport hazard class(es): 9, EHSM Packing group: III Environmental hazards: yes Marine pollutant: YES Special precautions for user: None known
Air transport IATA/ICAO	UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains FENPROPIMORPH) Transport hazard class(es): 9, EHSM Packing group: III Environmental hazards: yes Special precautions for user: None known

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Regulation: Not evaluated
Shipment approved: Not evaluated
Pollution name: Not evaluated
Pollution category: Not evaluated
Ship Type: Not evaluated
Further information : This product is subject to the most recent edition of "The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations" and their amendments (United Kingdom).

SECTION 15: Regulatory Information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
To avoid risks to man and the environment, comply with the instructions for use. The data should be considered when making any assessment under the Control of Substances Hazardous to Health Regulations (COSHH), and related guidance, for example, 'COSHH Essentials' (United Kingdom). This product is classified under the Chemicals (Hazard Information and Packaging) Regulations, (CHIP) (United Kingdom). This product may be subject to the Control of Major Accident Hazards Regulations (COMAH), and amendments if specific threshold tonnages are exceeded (United Kingdom). If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.
15.2. Chemical Safety Assessment
Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

SECTION 16: Other Information
For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:
Acute Tox. Acute toxicity
Skin Corr./Irrit. Skin corrosion/irritation
Repr. Reproductive toxicity

Aquatic Acute Hazardous to the aquatic environment - acute
Aquatic Chronic Hazardous to the aquatic environment - chronic
Flam. Liq. Flammable liquids
Eye ./Irrit. Serious eye damage/eye irritation
STOT SE Specific target organ toxicity — single exposure
H315 Causes skin 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.
EUH401 To avoid risks to human health and the environment, comply with the instructions for use.
H302 Harmful if swallowed.
H411 Toxic to aquatic life with long lasting effects.
H226 Flammable liquid and vapour.
H318 Causes serious eye damage.
H312 Harmful in contact with skin.
H336 May cause drowsiness or dizziness.
H335 May cause respiratory irritation.

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.