CLAYTON PLANT PROTECTION
CLAYTON VIVA Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 1/dsc 31/1/2018
This version replaces all previous versions

SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier CLAYTON VIVA
1.2. Relevant identified uses of the substance or mixture and uses advised. HERBICIDE
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.cpp.ag Email: info@cpp.ag

SECTION 2: Hazards Identification
2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]Mixture/Substance: SDS EU 2015: According to Regulation (EU) 2015/830 (REACH Annex II)
Flammable liquids, Category 3 H226
Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Sensitisation — Skin, Category 1 H317
Hazardous to the aquatic environment — Acute Hazard, Category 1 H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410
Full text of hazard classes and H-statements : see section 16
Adverse physicochemical, human health and environmental effects
Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life with long lasting effects.
2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard
Signal Word :Warning

Hazard Statements :	H226 - Flammable liquid and vapour H315 - Causes skin irritation H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H410 - Very toxic to aquatic life with long lasting effects
Precautions Statements :	P280 - Wear protective gloves, protective clothing, eye protection P302+P352 - IF ON SKIN: Wash with plenty of water P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing 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
EUH-statements	EUH401 - To avoid risks to human health and the environment, comply with the instructions for use
Extra phrases	SP1: 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) SPe3: To protect aquatic organisms respect an unsprayed buffer zone of 12 metres to surface water bodies in line with LERAP requirements

2.3 Other hazards - None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
3.1. Substance Not applicable
3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Pyridate	(CAS No) 55512-33-9 (EC no) 259-686-7	<60%	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Cyclohexanone	(CAS No) 108-94-1 (EC no) 203-631-1 (EC index no) 606-010-00-7	< 25	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318
Aromatic Hydrocarbons	(EC no) 922-153-0	< 10	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Calcium Dodecylbenzene sulphonate	> 3		Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Chronic 3, H412
Alcohol ethoxylate / propoxylate	(CAS No) 9038-95-3	>= 3	Acute Tox. 3 (Inhalation), H331

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures First-aid measures general : IF exposed or concerned: Get medical advice/attention. First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. First-aid measures after ingestion : Call a poison centre or a doctor if you feel unwell.
4.2. Most important symptoms and effects, both acute and delayed Symptoms/injuries after skin contact : Irritation. May cause an allergic skin reaction. Symptoms/injuries after eye contact : Eye irritation.
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 : Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Special hazards arising from the substance or mixture. Fire hazard : Flammable liquid and vapour. Hazardous decomposition products in case of fire : Toxic fumes may be released.
5.3. Advice for firefighters Protection during firefighting : 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. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.
6.1.2. For emergency responders Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions Avoid release to the environment.
6.3. Methods and material for containment and cleaning up. For containment : Collect spillage. Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections. For further information refer to section 13

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.
Hygiene measures : Wash contaminated clothing before re-use. Contaminated work clothing should not be allowed out of the workplace. 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. Technical measures : Ground/bond container and receiving equipment. Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
7.3. Specific end use(s) No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters : No additional information available
8.2. Exposure controls : Appropriate engineering controls : Ensure good ventilation of the work station. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge.
Personal protective equipment : Gloves. Protective clothing. Protective goggles.
Hand protection : Protective gloves Eye protection : Safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment
Environmental exposure controls : Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state : Liquid	Decomposition temperature : No data available
Appearance : Liquid.	Flammability (solid, gas) : Flammable
Colour : light brown.	Vapour pressure : No data available
Odour : slightly.	Relative vapour density at 20 °C : No data available
Odour threshold : No data available	Relative density : No data available
pH : No data available	Density : 1,07 (20°C)
pH solution : 5,6 (1%; 20°C)	Solubility : No data available
Relative evaporation rate (butylacetate=1) : No data available	Log Pow : No data available
	Viscosity, kinematic : No data available
Melting point : Not applicable	Viscosity, dynamic : 15,9 mPa.s (40°C)

Freezing point : No data available Boiling point : No data available Flash point : 59 °C Auto-ignition temperature : > 365 °C	Explosive properties : No data available 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 Flammable liquid and vapour.
10.2. Chemical stability Stable under normal conditions.
10.3. Possibility of hazardous reactions No dangerous reactions known under normal conditions of use.
10.4. Conditions to avoid Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.
10.5. Incompatible materials No additional information available
10.6. Hazardous decomposition products. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
Acute toxicity : Not classified
Clayton Viva - LD50 oral rat ≥ 2000 LD50 dermal rat ≥ 4000 LC50 inhalation rat (mg/l) > 6,37 mg/l/4h
Pyridate (55512-33-9) - LD50 oral rat > 2000 mg/kg LD50 dermal rat > 2000 mg/kg LC50 inhalation rat (Dust/Mist - mg/l/4h) > 4,37 mg/l/4h
Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity Ecology - general : Very toxic to aquatic life with long lasting effects.

Clayton Viva	Pyridate (55512-33-9)
LC50 fish 1 2,59 mg/l	LC50 fish 1 > 1 mg/l
EC50 Daphnia 2 0,04 mg/l	EC50 Daphnia 1 ≈ 0,49 mg/l
ErC50 (algae) 0,275 mg/l (72 H)	EC50 72h algae (1) > 0,75 mg/l
NOEC chronic fish 0,1 mg/l (21 d)	NOEC chronic crustacea 0,01 mg/l 21 d
NOEC chronic crustacea 0,063 (21 d)	NOEC (additional information) daphnia

12.2. Persistence and degradability
Pyridate (55512-33-9) - Persistence and degradability - No supplementary information available.
12.3. Bioaccumulative potential
Pyridate (55512-33-9) - BCF fish 1 ≈ 116,3 Log Pow 4,01 (20°C) Bioaccumulative potential No.
12.4. Mobility in soil No additional information available
12.5. Results of PBT and vPvB assessment
Component - Pyridate (55512-33-9). PBT: not relevant – no registration required vPvB: not relevant – no registration required
12.6. Other adverse effects No additional information available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Regional legislation (waste) : Waste instruction.
Additional information : Flammable vapours may accumulate in the container.

SECTION 14: TRANSPORT INFORMATION

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number 1993 14.2. UN proper shipping name FLAMMABLE LIQUID, N.O.S. Transport document description UN 1993 FLAMMABLE LIQUID, N.O.S. (Cyclohexanone,	14.1. UN number 1993 14.2. UN proper shipping name FLAMMABLE LIQUID, N.O.S. Transport document description UN 1993 FLAMMABLE LIQUID, N.O.S. (Cyclohexanone,	14.1. UN number 1993 14.2. UN proper shipping name FLAMMABLE LIQUID, N.O.S. Transport document description UN 1993 FLAMMABLE LIQUID, N.O.S. (Cyclohexanone,	14.1. UN number 1993 14.2. UN proper shipping name FLAMMABLE LIQUID, N.O.S. Transport document description UN 1993 FLAMMABLE LIQUID, N.O.S. (Cyclohexanone,	14.1. UN number 1993 14.2. UN proper shipping name FLAMMABLE LIQUID, N.O.S. Transport document description UN 1993 FLAMMABLE LIQUID, N.O.S. (Cyclohexanone,

Aromatic Hydrocarbons), 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS 14.3. Transport hazard class(es) 3 14.4. Packing group III Environmental hazards Dangerous for the environment : Yes	Aromatic Hydrocarbons), 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS 14.3. Transport hazard class(es) 3 14.4. Packing group III Environmental hazards Dangerous for the environment : Yes Marine pollutant : Yes	Aromatic Hydrocarbons), 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS 14.3. Transport hazard class(es) 3 14.4. Packing group III Environmental hazards Dangerous for the environment : Yes	Aromatic Hydrocarbons), 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS 14.3. Transport hazard class(es) 3 14.4. Packing group III Environmental hazards Dangerous for the environment : Yes	Aromatic Hydrocarbons), 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS 14.3. Transport hazard class(es) 3 14.4. Packing group III Environmental hazards Dangerous for the environment : Yes

No supplementary information available
14.6. Special precautions for user
- Overland transport Orange plates :

30
1993

Transport by sea - No data available
Air transport - No data available
Inland waterway transport - Classification code (ADN) : F1 Number of blue cones/lights (ADN) : 0
Rail transport - No data available
14.7. Transport in bulk according to Annex II of MARPOL 73/78 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 - Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
15.1.2. National regulations - National regulation
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. 3 (Inhalation) Acute toxicity (inhal.), Category 3 Acute Tox. 4 (Dermal) Acute toxicity (dermal), Category 4 Acute Tox. 4 (Inhalation) Acute toxicity (inhal.), Category 4 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 Aquatic Chronic 3 Hazardous to the aquatic environment — Chronic Hazard, Category 3 Asp. Tox. 1 Aspiration hazard, Category 1 Eye Dam. 1 Serious eye damage/eye irritation, Category 1 Eye Irrit. 2 Serious eye damage/eye irritation, Category 2 Flam. Liq. 3 Flammable liquids, Category 3 Skin Irrit. 2 Skin corrosion/irritation, Category 2 Skin Sens. 1 Sensitisation — Skin, Category 1 Skin Sens. 1B Sensitisation — Skin, category 1B STOT SE 3 Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H226 Flammable liquid and vapour H302 Harmful if swallowed H304 May be fatal if swallowed and enters airways H312 Harmful in contact with skin H315 Causes skin irritation H317 May cause an allergic skin reaction H318 Causes serious eye damage H319 Causes serious eye irritation H331 Toxic if inhaled H332 Harmful if inhaled H335 May cause respiratory irritation 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 H412 Harmful to aquatic life with long lasting effects EUH401 To avoid risks to human health and the environment, comply with the instructions for use

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.