

CLAYTON PLANT PROTECTION

CLAYTON EVEREST Safety Data Sheet according to Regulation (EU) No. 1907/2006. Version 1/dsc/16/12/2019
This version replaces all previous versions

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

1.1. Product identifier CLAYTON EVEREST

1.2. Relevant identified uses of the substance or mixture and uses advised. PLANT GROWTH REGULATOR FOR AGRICULTURE

1.3. Details of the supplier of the safety data sheet : Marketing Company in UK
Clayton Plant Protection (UK) Ltd., Bracetown Business Park, Clonee, Dublin. D15YT2T 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 (REGULATION (EC) No 1272/2008) Acute toxicity, Category 4 H302: Harmful if swallowed.
Acute toxicity, Category 4 H312: Harmful in contact with skin.
Corrosive to metals, Category 1 H290: May be corrosive to metals.

2.2 Label elements

Labelling in accordance with Regulation (EC) No 1272/2008 (CLP)

Hazard pictograms



Signal word: WARNING

Hazard Statements

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H290 May be corrosive to metals.

Precautionary Statements

Prevention: P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response: P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor/ physician if you feel unwell.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P390 Absorb spillage to prevent material damage.
Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Additional Labelling

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

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).

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Chlormequat chloride	999-81-5	Acute Tox. 4; H302 Acute Tox. 4; H312	42.6 - 68.4

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

If inhaled : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Take off all contaminated clothing immediately. Get medical attention immediately if irritation persists.

In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

If swallowed : Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Irregular cardiac activity sweating Nausea Diarrhoea Vomiting

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

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Suitable extinguishing media : Water spray Carbon dioxide (CO₂) Alcohol-resistant foam

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting : Thermal decomposition can lead to release of irritating gases and vapours.

Hazardous combustion products : Carbon monoxide Nitrogen oxides (NO_x)

5.3 Advice for firefighters. Special protective equipment : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire-fighting gear. Further information : None known.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment. Local authorities should be advised if significant spillages cannot be contained.

6.2 Environmental precautions : Do not contaminate water.

6.3 Methods and material for containment and cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections For personal protection see section 8. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin, eyes and clothing. Do not taste or swallow. Wash thoroughly after handling.

Advice on protection against fire and explosion : None known.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3 Specific end use(s) : Plant growth regulator

SECTION 8: Exposure controls/personal protection

8.1 Control parameters Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Personal protective equipment

Eye protection : Safety glasses

Hand protection : Neoprene gloves Rubber gloves The data about break through time/strength of material are standard values. The exact break through time/strength of material has to be obtained from the producer of the protective glove.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Protective measures : Ensure that eye flushing systems and safety showers are located close to the working place.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : light yellow

Odour : slight

Odour Threshold : not determined pH

: 4 Concentration: 1 g/l

Melting point/range : 225 °C Active ingredient

Boiling point/boiling range : Decomposition: Stable up to the melting point. Active ingredient Flash point : Not applicable

Evaporation rate : not determined

Upper explosion limit / Upper flammability limit : not determined

Lower explosion limit / Lower flammability limit : not determined

Vapour pressure : < 0.00001 hPa (25 °C) Active ingredient

Relative vapour density : not determined

Relative density : 1.144

Density : 1.144 g/cm³

Solubility(ies) Water solubility : > 886 g/l Active ingredient

Partition coefficient: noctanol/water : Pow: 0.001 log Pow: < -3

Autoignition temperature not determined

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Decomposition temperature : Not applicable
Viscosity dynamic : not determined
Viscosity, kinematic : not determined
Explosive properties : Not explosive Active ingredient
Oxidizing properties : Not classified Active ingredient
9.2 Other information
Metal corrosion rate : Corrosive to metals

SECTION 10: Stability and reactivity

10.1 Reactivity None reasonably foreseeable.
10.2 Chemical stability Stable under normal conditions.
10.3 Possibility of hazardous reactions: Hazardous decomposition products formed under fire conditions.
10.4 Conditions to avoid : None known.
10.5 Incompatible materials Materials to avoid : Metals
10.6 Hazardous decomposition products Carbon dioxide (CO₂) Carbon monoxide Nitrogen oxides (NO_x) Hydrogen chloride gas

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity Product:
Acute oral toxicity : LD50 Oral (Rat): 520 mg/kg
Acute inhalation toxicity : LC50 (Rat): > 5.2 mg/l Exposure time: 4 h Test atmosphere: vapour Assessment: The substance or mixture has no acute inhalation toxicity Acute dermal toxicity : LD50 Dermal (Rabbit): 1,250 mg/kg

Components: Chlormequat chloride:
Acute oral toxicity : LD50 Oral (Rat): 520 mg/kg
Acute inhalation toxicity : LC50 (Rat): > 5.2 mg/l Exposure time: 4 h Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity : LD50 Dermal (Rabbit): 1,250 mg/kg LD50 Dermal (Rat): > 2,000 mg/kg

Skin corrosion/irritation

Product: Species : Rabbit Exposure time : 24 h Result : No skin irritation
Components: Chlormequat chloride: Species : Rabbit Exposure time : 24 h Result : No skin irritation

Serious eye damage/eye irritation

Product: Species : Rabbit Result : No eye irritation Remarks : No data available Components:
Chlormequat chloride: Species : Rabbit Result : No eye irritation

Respiratory or skin sensitization

Product: Result : Did not cause sensitization on laboratory animals.
Components:
Chlormequat chloride: Result : Did not cause sensitization on laboratory animals.

Germ cell mutagenicity

Product: Germ cell mutagenicity- Assessment : Did not show mutagenic effects in animal experiments.
Components: Chlormequat chloride:
Germ cell mutagenicity- Assessment : Did not show mutagenic effects in animal experiments.

Carcinogenicity

Product: Remarks : This information is not available.
Carcinogenicity - Assessment : Did not show carcinogenic effects in animal experiments.

Components: Chlormequat chloride:

Carcinogenicity - Assessment : Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

Product: Effects on fertility : Remarks: No data available
Reproductive toxicity - Assessment : No toxicity to reproduction Did not show teratogenic effects in animal experiments.
Components: Chlormequat chloride:
Reproductive toxicity - Assessment : No toxicity to reproduction Did not show teratogenic effects in animal experiments.

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STOT-single exposure Product: Remarks : No data available
STOT-repeated exposure Product: Remarks : No data available

Aspiration toxicity Product: No data available
Information on likely routes of exposure Product:
Inhalation : Remarks: None known.

Skin contact : Remarks: Harmful in contact with skin.
Eye contact : Remarks: None known.
Ingestion : Remarks: Harmful if swallowed.

SECTION 12: Ecological information

12.1 Toxicity

Product: Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Remarks:
Information refers to the main ingredient.
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 31.7 mg/l Exposure time: 48 h
Remarks: Information refers to the main ingredient.
Toxicity to microorganisms : IC50 (Bacteria): 43 mg/l Exposure time: 3 h

Components: Chlormequat chloride:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 31.7 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants : ErC50 (Lemna gibba (gibbous duckweed)): 28 mg/l Exposure time: 7 d
EbC50 (Lemna gibba (gibbous duckweed)): 5.3 mg/l Exposure time: 7 d
NOEC (Lemna gibba (gibbous duckweed)): 0.1 mg/l

Toxicity to microorganisms : IC50 (Bacteria): 43 mg/l Exposure time: 3 h
Toxicity to fish (Chronic toxicity) : NOEC: 43.1 mg/l Exposure time: 21 d Species: Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 2.4 mg/l Exposure time: 21 d Species:
Daphnia magna (Water flea)

12.2 Persistence and degradability

Product: Biodegradability : Result: Readily biodegradable.
Components: Chlormequat chloride: Biodegradability : Result: Readily biodegradable.

12.3 Bioaccumulative potential No data available

12.4 Mobility in soil No data available

12.5 Results of PBT and vPvB assessment

Product: Assessment : 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)..

12.6 Other adverse effects No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.
Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number ADN : UN 1760 ADR : UN 1760 IMDG : UN 1760 IATA : UN 1760

14.2 UN proper shipping name

ADN : CORROSIVE LIQUID, N.O.S. (Chlormequat chloride)
ADR : CORROSIVE LIQUID, N.O.S. (Chlormequat chloride)
IMDG : CORROSIVE LIQUID, N.O.S. (Chlormequat chloride)
IATA : Corrosive liquid, n.o.s. (Chlormequat chloride)

14.3 Transport hazard class(es)

ADN : 8 ADR : 8 IMDG : 8 IATA : 8

14.4 Packing group

ADN Packing group : III Classification Code : C9 Hazard Identification Number : 80 Labels : 8 ADR
Packing group : III Classification Code : C9 Hazard Identification Number : 80 Labels : 8
Tunnel restriction code : (E)
IMDG Packing group : III Labels : 8 EmS Code : F-A, S-B

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IATA (Cargo) Packing instruction (cargo aircraft) : 856 Packing instruction (LQ) : Y841 Packing group : III
Labels : Corrosive

IATA_P (Passenger) Packing instruction (passenger aircraft) : 852 Packing instruction (LQ) : Y841
Packing group : III Labels : Corrosive

14.5 Environmental hazards ADN Environmentally hazardous : no ADR Environmentally hazardous : no IMDG
Marine pollutant : no

14.6 Special precautions for user. The transport classification(s) provided herein are for informational purposes only,
and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet.
Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country
regulations.

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

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59). : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of
dangerous chemicals : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident
hazards involving dangerous substances. H2 ACUTE TOXIC

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution
prevention and control) Not applicable

Other regulations: Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations,
where applicable. Take note of Directive 94/33/EC on the protection of young people at work or stricter national
regulations, where applicable.

The ingredients of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL	IECSC : On the inventory, or in compliance with the inventory
AICS : On the inventory, or in compliance with the inventory	TCSI : On the inventory, or in compliance with the inventory
ENCS : Not listed	TSCA : On the inventory, or in compliance with the inventory
ISHL : On the inventory, or in compliance with the inventory	
KECI : On the inventory, or in compliance with the inventory	
PICCS : Not listed	

SECTION 16: Other information

Full text of H-Statements H302 : Harmful if swallowed. H312 : Harmful in contact with skin.

Full text of other abbreviations Acute Tox. : Acute toxicity 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; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration,

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Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information : Classification of the mixture: Classification procedure: Acute Tox. 4 H302 On basis of test data. Acute Tox. 4 H312 On basis of test data. Met. Corr. 1 H290

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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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