

CLAYTON PLANT PROTECTION

CLAYTON CAYMAN Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 1/dsc 8/2/2018

This version replaces all previous versions

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

1.1. Product identifier CLAYTON CAYMAN

1.2. Relevant identified uses of the substance or mixture and uses advised. INSECTICIDE

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 in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Reproductive toxicity: Category 1B H360FD May damage fertility. May damage the unborn child.

Carcinogenicity: Category 2 H351 Suspected of causing cancer.

Acute toxicity: Category 4 H302 Harmful if swallowed.

Skin irritation: Category 2 H315 Causes skin irritation.

Eye irritation: Category 2 H319 Causes serious eye irritation.

Specific target organ toxicity - single exposure: Category 3 H336 May cause drowsiness or dizziness.

Acute aquatic toxicity: Category 1 H400 Very toxic to aquatic life.

Chronic aquatic toxicity: Category 1 H410 Very 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.

Hazard label for supply/use required.

Hazardous components which must be listed on the label: Thiacloprid

Signal Word : Danger



Hazard statements

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

H360FD May damage fertility. May damage the unborn child.

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.

Restricted to professional users.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P201 Obtain special instructions before use.

P308 + P311 IF exposed or concerned: Call a POISON CENTRE/ doctor/ physician.

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.

2.3 Other hazards : No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature : Oil dispersion (OD) Thiacloprid 240 g/l

Hazardous components : Hazard statements according to Regulation (EC) No. 1907/2006

Name	CAS-No. / EC-No. / REACH Reg. No.	Classification Regulation (EC) No 1272/2008	Conc. [%]
Thiacloprid	111988-49-9	Acute Tox. 3, H301 Acute Tox. 4, H332 Carc. 2, H351 STOT SE 3, H336 Repr. 1B, H360FD Aquatic Acute 1, H400 Aquatic Chronic 1, H410	23.1
Fatty alcohol ethoxylate	68131-39-5 500-195-7	Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Acute 1, H400	> 0.25 – < 2.5
2-Ethylhexanol propylene ethyleneglycol ether	64366-70-7	Aquatic Chronic 3, H412	> 1 – < 25

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2,6-Di-tert-butyl-4methylphenol	128-37-0 204-881-4 01-2119555270-46-xxxx	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	> 0.1 – < 0.25
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Further information : Thiacloprid 111988-49-9 M-Factor: 100 (acute), 100 (chronic)
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 : Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.

Inhalation : Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.

Skin contact Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. If eye irritation or redness persists, see an ophthalmologist.

Ingestion : Call a physician or poison control centre immediately. Rinse mouth. Induce vomiting only, if: 1. patient is fully conscious, 2. medical aid is not readily available, 3. a significant amount (more than a mouthful) has been ingested and 4. time since ingestion is less than 1 hour. (Vomit should not get into the respiratory tract.)

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : If large amounts are ingested, the following symptoms may occur:

Nausea, Vomiting, Diarrhoea, Salivation, Headache, Dizziness, Confusion, Excitement, Bradycardia, Tachycardia, Coma, Hypotension, Respiratory paralysis

Symptoms and hazards refer to effects observed after intake of significant amounts of the active ingredient(s).

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically. Monitor: respiratory and cardiac functions. Oxygen or artificial respiration if needed. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. There is no specific antidote.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable High volume water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire the following may be released: Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Sulphur oxides, Nitrogen oxides (NOx)

5.3 Advice for firefighters

Special protective equipment for fire-fighters : In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

Further information : Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions : Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.

6.2 Environmental precautions : Do not allow to get into surface water, drains and ground water. If spillage enters drains leading to sewage works inform local water company immediately. If spillage enters rivers or watercourses, inform the Environment Agency (emergency telephone number 0800 807060).

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling : No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Ensure adequate ventilation.

Advice on protection against fire and explosion : No special precautions required.

Hygiene measures : Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands immediately after work, if necessary take a shower. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

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7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Store bulk material and packed materials in a closed warehouse or under cover protected against direct sunlight and frost.

Advice on common storage : Keep away from food, drink and animal feeding-stuffs.

Suitable materials HDPE (high density polyethylene): Only IBC 1000 litre are recommended as bulk container for re-filling.

7.3 Specific end uses : Refer to the label and/or leaflet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Thiacloprid	111988-49-9	0.34 mg/m ³ (TWA)		OES BCS*
2,6-Di-tert-butyl-4methylphenol	128-37-0	10 mg/m ³ (TWA)	12 2011	EH40 WEL

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

8.2 Exposure controls

Refer to COSHH assessment (Control of Substances Hazardous to Health (Amendment) Regulations 2004).

Engineering controls should be used in preference to personal protective equipment wherever practicable. Refer also to COSHH Essentials.

Personal protective equipment : In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection : Respiratory protection is not required under anticipated circumstances of exposure.

Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation.

Always follow respirator manufacturer's instructions regarding wearing and maintenance.

Hand protection : Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness of 0,4 mm). Wash when contaminated and dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

Eye protection : Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

Skin and body protection : Wear standard coveralls and Category 3 Type 6 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form dispersion	Water solubility dispersible
Colour white	Partition coefficient: noctanol/water Thiacloprid: log Pow: 1.26 at 20 °C
Odour weak, characteristic	Viscosity, dynamic <= 700 mPa.s at 20 °C Velocity gradient 7.5 /s
pH 5.0 - 8.0 at 1 % (23 °C) (deionized water)	Surface tension 23 mN/m at 25 °C Determined in the undiluted form.
Flash point >100 °C	Oxidizing properties No oxidizing properties
Autoignition temperature 410 °C	Explosivity Not explosive
Density ca. 1.04 g/cm ³ at 20 °C	

9.2 Other information : Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity. Thermal decomposition : Stable under normal conditions.

10.2 Chemical stability : Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions : No hazardous reactions when stored and handled according to prescribed instructions.

10.4 Conditions to avoid : Extremes of temperature and direct sunlight.

10.5 Incompatible materials : Store only in the original container.

10.6 Hazardous decomposition products : No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity LD50 (rat) > 500 - < 1,000 mg/kg Test conducted with a similar formulation.

Acute inhalation toxicity LC50 (rat) > 0.846 mg/l Exposure time: 4 h Determined in the form of a respirable aerosol.

Highest attainable concentration. Test conducted with a similar formulation.

Acute dermal toxicity LD50 (rat) > 4,000 mg/kg Test conducted with a similar formulation.

Skin irritation Irritating to skin. (rabbit) Test conducted with a similar formulation.

Eye irritation Irritating to eyes. (rabbit) Test conducted with a similar formulation.

Sensitisation Non-sensitizing. (guinea pig) OECD Test Guideline 406, Magnusson & Kligman test. Test conducted with a similar formulation.

Assessment repeated dose toxicity. Thiacloprid did not cause specific target organ toxicity in experimental animal studies.

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Assessment mutagenicity. Thiachloprid was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
Assessment carcinogenicity. Thiachloprid caused at high dose levels an increased incidence of tumours in rats in the following organ(s): uterus, Thyroid. Thiachloprid caused at high dose levels an increased incidence of tumours in mice in the following organ(s): ovaries. The tumours seen with Thiachloprid were caused through a non-genotoxic mechanism, which is not relevant at low doses. The mechanism that triggers tumours in rodents is not relevant for the low exposures encountered under normal use conditions.

Assessment toxicity to reproduction. Thiachloprid caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. Thiachloprid caused difficulties in parturition in rats. The mechanism of action for this effect is not considered to be relevant to man.

Assessment developmental toxicity. Thiachloprid caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Thiachloprid are related to maternal toxicity.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity : Toxicity to fish. LC50 (Lepomis macrochirus (Bluegill sunfish)) 32.8 mg/l Exposure time: 96 h Test conducted with a similar formulation.

Toxicity to aquatic invertebrates. LC50 (Chironomus riparius (non-biting midge)) 1,92 µg/l Exposure time: 24 h Test conducted with a similar formulation.

Toxicity to aquatic plants. IC50 (Desmodesmus subspicatus (green algae)) 96.7 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient.

12.2 Persistence and degradability. Biodegradability Thiachloprid: not rapidly biodegradable. Koc Thiachloprid: Koc: 615

12.3 Bioaccumulative potential. Bioaccumulation Thiachloprid: Does not bioaccumulate.

12.4 Mobility in soil. Thiachloprid: Slightly mobile in soils

12.5 Results of PBT and vPvB assessment. PBT and vPvB assessment Thiachloprid: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

Additional ecological information. No other effects to be mentioned.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product. In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant. Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).

Contaminated packaging. Small containers (< 10 l or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times. Add washings to sprayer at time of filling.

Dispose of empty and cleaned packaging safely. Large containers (> 25 l or > 25 kg) should not be rinsed or re-used for any other purpose. Return large containers to supplier. Follow advice on product label and/or leaflet.

Waste key for the unused product. 02 01 08* agrochemical waste containing dangerous substances

SECTION 14: TRANSPORT INFORMATION

ADR/RID/ADN

14.1 UN number 3082

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (THIACHLOPRID SOLUTION)

14.3 Transport hazard class(es) 9

14.4 Packing group III

14.5 Environm. Hazardous Mark YES

Hazard no. 90

Tunnel Code E

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

IMDG

14.1 UN number 3082

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (THIACHLOPRID SOLUTION)

14.3 Transport hazard class(es) 9

14.4 Packing group III

14.5 Marine pollutant YES

IATA

14.1 UN number 3082

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (THIACHLOPRID SOLUTION)

14.3 Transport hazard class(es) 9

14.4 Packing group III

14.5 Environm. Hazardous Mark YES

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UK 'Carriage' Regulations

14.1 UN number 3082

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (THIACLOPRID SOLUTION)

14.3 Transport hazard class(es) 9

14.4 Packing group III

14.5 Environm. Hazardous Mark YES Emergency action code 3Z

14.6 Special precautions for user See sections 6 to 8 of this Safety Data Sheet.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No transport in bulk according to the IBC Code.

SECTION 15: REGULATORY INFORMATION

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

UK and Northern Ireland Regulatory References : This material may be subject to some or all of the following regulations (and any subsequent amendments). Users must ensure that any uses and restrictions as indicated on the label and/or leaflet are followed.

Transport : Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No 1348) Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 (SI 1997 No 2367) Air Navigation Dangerous Goods Regulations 2002 (SI 2002 No 2786)

Supply and Use : Chemical (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No 716)

Chemical (Hazard Information and Packaging for Supply) (Northern Ireland) Regulations 2009 Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No 2677) EH40 Occupational Exposure Limits - Table 1 List of approved workplace exposure limits Control of Pesticide Regulations 1986 Dangerous Substances and Explosive Atmospheres Regulations 2002

Waste Treatment : Environmental Protection Act 1990, Part II Environmental Protection (Duty of Care) Regulations

1991 The Waste Management Licensing Regulations 1994 (as amended) Hazardous Waste Regulations 2005

(Replacing Special Waste Regulations 1996 as amended) Landfill Directive Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94) Water Resources Act 1991 Anti-Pollution Works Regulations 1999

Further information : WHO-classification: II (Moderately hazardous)

15.2 Chemical Safety Assessment : A chemical safety assessment is not required.

SECTION 16: OTHER INFORMATION

Text of the hazard statements mentioned in Section 3

H301 Toxic if swallowed. H302 Harmful if swallowed. H318 Causes serious eye damage. H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer. H360FD May damage fertility. May

damage the unborn child. 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.

Abbreviations and acronyms

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 CAS-Nr. Chemical Abstracts

Service number Conc. Concentration EC-No. European community number ECx Effective concentration to x % EH40

WEL Worker Exposure Limit EINECS European inventory of existing commercial substances ELINCS European list of

notified chemical substances EN European Standard EU European Union IATA International Air Transport Association

IBC International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)

ICx Inhibition concentration to x % IMDG International Maritime Dangerous Goods LCx Lethal concentration to x % LDx

Lethal dose to x % LOEC/LOEL Lowest observed effect concentration/level MARPOL MARPOL: International

Convention for the prevention of marine pollution from ships N.O.S. Not otherwise specified NOEC/NOEL No observed

effect concentration/level OECD Organization for Economic Co-operation and Development RID Regulations

concerning the International Carriage of Dangerous Goods by Rail SI Statutory Instrument TWA Time weighted

average UN United Nations WHO World health organisation

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.