

CLAYTON PLANT PROTECTION

CLAYTON TINE Safety Data Sheet according to Regulation (EC) No. 1907/2006 and Regulation (EU) No. 453/2010.
Version 1/dsc 19/01/2015. This version replaces all previous versions.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name : CLAYTON TINE

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use : Fungicide

1.3 Details of the supplier of the safety data sheet Company

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 according to Regulation (EU) 1272/2008


Acute toxicity (oral) H319	Category 4	H302 Eye Irritation	Category 2
Chronic aquatic toxicity		Category 3	H412

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xn	Harmful
R22	Harmful if swallowed
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008


Hazard pictograms		
		
Signal Word	: Warning	Harmful if swallowed
Hazard Statements	:H302	Causes serious eye irritation
	:H319	Harmful to aquatic life with long lasting effects
Precautions Statements	:H412	Keep out of reach of children Avoid release to the environment.
	:P102	Wear protective gloves/protective clothing/eye protection/face protection
	:P273	IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.
	:P280	IF IN EYES: Rinse cautiously with water for several minutes.
	:P301/P312	Remove contact lenses, if present and easy to do. Continue rinsing.
	:P305/P351/P338	If eye irritation persists: Get medical advice/attention
	:P337/P313	Collect spillage
	:P391	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. To avoid risks to human health and the environment comply with the instructions for use.
	:P501	
Supplemental Information	:EUH401	

Hazardous components which must be listed on the label: Metalaxyl-M

Labelling: EU Directives 67/548/EEC or 1999/45/EC

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Symbol(s)	
	
Harmful	
R-phrase(s)	:R22 Harmful if swallowed :R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	:S2 Keep out of the reach of children. :S13 Keep away from food, drink and animal feedingstuffs. :S20/21 When using do not eat, drink or smoke. :S35 This material and its container must be disposed of in a safe way. :S57 Use appropriate containment to avoid environmental contamination.
Special labelling of certain mixtures	To avoid risks to man and the environment, comply with instructions for use.

Hazardous components which must be listed on the label: Metalaxyl-M

2.3 Other hazards : None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures Hazardous components

Chemical Name	CAS No. EC No. Registration Number	Classification (67/548/EEC)	Classification (REGULATION (EC) No. 1272/2008)	Concentration
metalaxyl-M	70630-17-0	Xn R22 R41	Acute Tox.4; H302 Eye Dam.1; H318	45.2 % w/w
propane-1,2-diol	57-55-6 200-338-0	-	-	20 – 30 % w/w
acetophenone	98-86-2 202-708-7 01-2119533169-37-0004	Xn R22 R36	Acute Tox.4; H302 Eye Irrit.2; H319	10 – 20 % w/w
Dodecylbenzene sulphonic acid	85536-14-7 68584-22-5 287-494-3	C R22 R35	Acute Tox.4; H302 Skin Corr.1A; H314	1 – 5 % w/w
Amines, tallow alkyl, ethoxylated	61791-26-2	C R34	Skin Corr.1B; H314	1 – 5 % w/w
Heptan-2-one	110-43-0 203-767-1	Xn R10 R20/22 R37/38 R67	Flam. Liq.3; H226 Acute Tox.4; H302 Acute Tox.4; H332 Skin Irrit.2; H315 STOT SE3; H335 STOT SE3; H336	1 – 5 % w/w

Substances for which there are Community workplace exposure limits.

For the full text of the R-phrases mentioned in this Section, see Section 16.

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 : Have the product container, label or Material Safety Data Sheet with you when calling an emergency number, a poison control centre or physician, or going for treatment.

Inhalation : Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.

Skin Contact : Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

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- Eye Contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.
- Ingestion : If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available

4.3 Indication of any immediate medical attention and special treatment needed

Medical advice : There is no specific antidote available. Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Extinguishing media - large fires
Use alcohol-resistant foam or water spray.

Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.

5.3 Advice for fire-fighters:

Wear full protective clothing and self-contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions:

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.
Refer to disposal considerations listed in section 13.

SECTION 7. HANDLING AND STORAGE 7.1 Precautions for safe handling

No special protective measures against fire required. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs.

7.3 Specific end use(s)

Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
metalaxyl-M	10 mg/m ³	8 h TWA	SYNGENTA

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Propane-1,2-diol	10 mg/m ³ (particulates)	8 h TWA	UK HSE
	150 ppm, 470 mg/m ³ (Total(vapour and particulates))	8 h TWA	UK HSE
Heptan-2-one	50 ppm, 237 mg/m ³ (Skin)	8 h TWA	UK HSE
	100 ppm, 475 mg/m ³ (skin)	15 min STEL	UK HSE
	50 ppm, 238 mg/m ³ (skin)	8 h TWA	IOELV
	100ppm, 475 mg/m ³	15 min STEL	IOELV

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

8.2 Exposure controls

- Engineering Measures : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.
- Protective measures : The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.
- Respiratory protection : No personal respiratory protective equipment normally required. A particulate filter respirator may be necessary until effective technical measures are installed.
- Hand protection : Chemical resistant gloves are not usually required. Select gloves based on the physical job requirements.
- Eye Protection : Eye protection is not usually required. Follow any site specific eye protection policies.
- Skin and body protection : No special protective equipment required. Select skin and body protection based on the physical job requirements.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES 9.1 Information on basic physical and chemical properties Physical State : Liquid

- Form : Liquid
- Colour : Yellow to orange
- Odour : Like ketone
- Odour Threshold : No data available pH : 6 – 10 at 1 % w/v
- Melting point/range : No data available Boiling point/boiling range : No data available
- Flash point : 80 °C at 767 mm Hg
- Evaporation rate : No data available Flammability (solid, gas) : No data available Lower explosion limit : No data available Upper explosion limit : No data available
- Vapour pressure : No data available
- Relative vapour density : No data available
- Density : 1.06 g/cm³ at 20 °C
- Solubility in other solvents : No data available Partition Coefficient n-octanol/water : No data available
- Autoignition temperature : 385 °C
- Thermal decomposition : No data available
- Viscosity, dynamic : 21.0 mPa.s at 40 °C. 50.2 mPa.s at 20 °C
- Viscosity, kinematic : No data available
- Explosive properties : Not explosive
- Oxidizing properties : Not oxidising

9.2 Other information

- Miscibility : Miscible
- Surface tension : 35.1 mN/m at 20 °C

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SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity	:	No information available
10.2 Chemical Stability	:	No information available
10.3 Possibility of hazardous reactions	:	None known. Hazardous polymerisation does not occur.
10.4 Conditions to avoid	:	No information available
10.5 Incompatible materials	:	No information available
10.6 Hazardous decomposition products	:	Combustion or thermal decomposition will evolve toxic and irritant vapours.

SECTION 11. TOXICOLOGICAL INFORMATION 11.1 Information on toxicological effects

Acute oral toxicity	:	LD50 female rat, 550 mg/kg
Acute inhalational toxicity	:	LC50 male and female rat, > 5.58 mg/l, 4 h
Acute dermal toxicity	:	LD50 male and female rat, > 2,000 mg/kg
Skin corrosion/irritation	:	Rabbit: non-irritating
Serious eye damage/eye irritation	:	Rabbit:
Respiratory or skin sensitisation	:	Guinea pig: not sensitising
Germ cell mutagenicity metalaxyl-M	:	Did not show mutagenic effects in animal experiments.
Carcinogenicity metalaxyl-M	:	Did not show carcinogenic effects in animal experiments.
Teratogenicity metalaxyl-M	:	Did not show teratogenic effects in animal experiments.
Reproductive toxicity metalaxyl-M STOT – single exposure Heptan-2-one	:	Did not show reproductive toxicity effects in animal experiments.
STOT – repeated exposure metalaxyl-M	:	May cause respiratory irritation. May cause drowsiness or dizziness.
	:	No adverse effect has been observed in chronic toxicity tests.

SECTION 12. ECOLOGICAL INFORMATION 12.1 Toxicity

Toxicity to fish	:	LC50 Oncorhynchus mykiss (rainbow trout), 15 mg/l, 96 h
Toxicity to aquatic invertebrates	:	EC50 Daphnia magna (water flea), 61 mg/l, 48 h
Toxicity to aquatic plants	:	EbC50 Pseudokirchneriella subcapitata (green algae), 19 mg/l, 72 h ErC50 Pseudokirchneriella subcapitata (green algae), 39 mg/l, 72 h

12.2 Persistence and degradability

Stability in water	:	
Metalaxyl-M	:	Degradation half life: 22.4 – 47.5 d. Not persistent in water
Stability in soil	:	
Metalaxyl-M	:	Degradation half life: <50 d. Not persistent in soil

12.3 Bioaccumulative potential

Metalaxyl-M	:	low potential for bioaccumulation.
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12.4 Mobility in soil

Metalaxyl-M	:	low to very high mobility in soil depending on soil type.
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12.5 Results of PBT and vPvB assessment

Metalaxyl-M	:	This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).
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12.6 Other adverse effects : None known.

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SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

- Product** : Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.
- Contaminated packaging** : Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION


Land transport (ADR/RID), Sea transport(IMDG), Air transport (IATA-DGR)

14.1	UN Number	:	Not dangerous goods
14.2	UN proper shipping name	:	Not applicable
14.3	Transport hazard class(es)	:	Not applicable
14.4	Packing Group	;	Not applicable
14.5	Environmental hazards	:	Not applicable

14.6 Special precautions for user : none

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 GHS-Labeling

Hazard pictograms	
	
Signal Word	: Warning
Hazard Statements	:H302 Harmful if swallowed :H319 Causes serious eye irritation :H412 Harmful to aquatic life with long lasting effects
Precautions Statements the environment.	:P102 Keep out of reach of children :P273 Avoid release to :P280 Wear protective gloves/protective clothing/eye protection/face protection :P301/P312 IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell. :P305/P351/P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. :P337/P313 If eye irritation persists: Get medical advice/attention :P391 Collect spillage :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.
Supplemental Information	:EUH401 To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label: Metalaxyl-M

15.2 Chemical Safety Assessment : A Chemical Safety Assessment is not required for this substance.

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SECTION 16. OTHER INFORMATION

Approval number, MAPP 14072. Use plant protection products safely. Always read the label and product information before use.

Full text of R-phrases referred to under sections 2 and 3:

R10	Flammable
R20/22	Harmful by inhalation and if swallowed
R22	Harmful if swallowed
R34	Causes burns
R35	Causes severe burns
R36	Irritating to eyes
R37/38	Irritating to respiratory system and skin
R41	Risk of serious damage to eyes
R67	Vapours may cause drowsiness and dizziness

Full text of H-Statements referred to under sections 2 and 3.

H226	Flammable liquid and vapour
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H412	Harmful to aquatic life with long lasting effects

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.