

CLAYTON PLANT PROTECTION

CLAYTON FAIZE Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 1/dsc 08/01/2015
This version replaces all previous versions.

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

1.1 Product identifier CLAYTON FAIZE

1.2 Relevant identified uses of the substance. Herbicide

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.cpp.ag Email: info@cpp.ag

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EU) 1272/2008

Acute toxicity (oral)	Category 4	H302
Acute aquatic toxicity	Category 1	H400
Chronic aquatic toxicity	Category 1	H410

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

Xn	Harmful
N	Dangerous for the environment
R22	Harmful if swallowed
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.1 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms

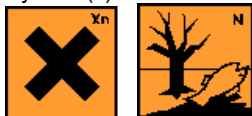


Hazard Statements	:H302	Harmful if swallowed.
	:H410	Very toxic to aquatic life with long lasting effects.
Precautions Statements	:P102	Keep out of reach of children.
	:P264	Wash hands thoroughly after use.
	:P270	Do not eat, drink or smoke when using this product.
	:P301/P312	IF SWALLOWED: Call a POISON CENTRE or doctor/ physician if you feel unwell.
	: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: terbuthylazine

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

Symbol(s)



Harmful

Dangerous for the environment

R-phrases(s)	:R22	Harmful if swallowed
	:R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
S-phrases(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:

- terbuthylazine

2.2 Other hazards : None known.

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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
Terbutylazine	5915-41-3 227-637-9	Xn, N R22 R50/53	Acute Tox.4; H302 Aquatic Acute1; H400 Aquatic Chronic1; H410	29.3 % w/w
Mesotrione	104206-82-8	N R50/53	Aquatic Acute1; H400 Aquatic Chronic1; H410	6.2 % 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.
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 feedingstuffs.

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.

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
mesotrione	10 mg/m ³	8 h TWA	SYNGENTA
Terbuthylazine	0.8 mg/m ³	8 h TWA	SYNGENTA

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	White to light brown	Odour	Characteristic
Odour Threshold	No data available	pH	2 – 5 at 1 % w/v
Melting point/range	No data available	Boiling point/boiling range	No data available
Flash point	>100 °C at 1,013 hPa	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	1.10 – 1.14 g/ml at 20 °C
Solubility in other solvents	No data available	Partition Coefficient n-octanol/water	No data available
Auto-ignition temperature	450 °C	Thermal decomposition	No data available
Viscosity, dynamic	109 – 238 mPa.s at 40 °C 225 – 383 mPa.s at 20 °C	Viscosity, kinematic	No data available
Explosive properties	Not explosive	Oxidizing properties	Not oxidising
Surface tension	35.4mN/m		

9.2 Other information : No data available

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	Median lethal dose female rat, ca. 310 mg/kg
Acute inhalational toxicity	LC50 acute toxicity estimate, > 5.0 mg/l
Acute dermal toxicity	Median lethal dose male and female rat, > 2,000 mg/kg
Skin corrosion/irritation terbuthylazine	Rabbit: non-irritating
Serious eye damage/eye irritation	Rabbit: mild eye irritation
Respiratory or skin sensitisation	Guinea pig: not a skin sensitiser in animal tests
Germ cell mutagenicity : Terbuthylazine	Did not show mutagenic effects in animal experiments
mesotrione	Did not show mutagenic effects in animal experiments
	Did not show carcinogenic effects in animal experiments

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Carcinogenicity :	Terbuthylazine mesotrione	Did not show carcinogenic effects in animal experiments
Teratogenicity	Terbuthylazine	Did not show teratogenic effects in animal experiments
Reproductive toxicity:	Terbuthylazine mesotrione	Did not show reproductive toxicity effects in animal experiments Did not show reproductive toxicity effects in animal experiments
STOT – repeated exposure :	Terbuthylazine mesotrione	No adverse effect has been observed in chronic toxicity tests. No adverse effect has been observed in chronic toxicity tests.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	LC50 <i>Oncorhynchus mykiss</i> (rainbow trout), 6.7 mg/l, 96 h
Toxicity to aquatic invertebrates	EC50 <i>Daphnia magna</i> (water flea), 53 mg/l, 48 h
Toxicity to aquatic plants	EbC50 <i>Pseudokirchneriella subcapitata</i> (green algae), 23 µg/l, 72 h ErC50 <i>Pseudokirchneriella subcapitata</i> (green algae), 87 µg/l, 72 h EC50 <i>Lemna gibba</i> (duckweed), 0.114 mg/l, 7 d

12.2 Persistence and degradability

Biodegradability : terbuthylazine	Not readily biodegradable
Stability in water : Terbuthylazine mesotrione	Degradation half life: 6 d. Not persistent in water Degradation half life: > 30 d at 25 °C. Persistent in water
Stability in soil : Terbuthylazine mesotrione	Degradation half life: 77 – 169 d. Not persistent in soil Degradation half life: 6 - 105 d. Not persistent in soil

12.3 Bioaccumulative potential

Terbuthylazine	Does not bioaccumulate
mesotrione	The substance has low potential for bioaccumulation.

12.4 Mobility in soil

Terbuthylazine	terbuthylazine has medium mobility in soil.
mesotrione	mesotrione has medium to high mobility in soil.

12.5 Results of PBT and vPvB assessment

Terbuthylazine,	These substances are not considered to be persistent, bioaccumulating nor toxic (PBT).
mesotrione	These substances are not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects : None known.

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)

14.1	UN Number	UN 3082
14.2	UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TERBUTHYLAZINE)
14.3	Transport hazard class(es)	9
14.4	Packing Group	III
	Labels	9
14.5	Environmental hazards	Environmentally hazardous

Sea transport (IMDG)

14.1	UN Number	UN 3082
14.2	UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TERBUTHYLAZINE)
14.3	Transport hazard class(es)	9
14.4	Packing Group	III
	Labels	9
14.5	Environmental hazards	Marine pollutant

Air transport (IATA-DGR)

14.1	UN Number	UN 3082
14.2	UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TERBUTHYLAZINE)
14.3	Transport hazard class(es)	9
14.4	Packing Group	III
	Labels	9
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

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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. H410 Very toxic to aquatic life with long lasting effects.
Precautions Statements	P102 Keep out of reach of children. P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P301/P312 IF SWALLOWED: Call a POISON CENTRE or doctor/ physician if you feel unwell. 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:	terbutylazine

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

SECTION 16. OTHER INFORMATION

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:

- R22 Harmful if swallowed
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

- H302 Harmful if swallowed
H400 Very toxic to aquatic life.
H410 Very toxic 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.