

CLAYTON PLANT PROTECTION

CLAYTON GATSO Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 1/dsc 8/05/2015

This version replaces all previous versions

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

1.1. Product identifier CLAYTON GATSO MAPP16244

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) 1272/2008 Physical and chemical hazards No classification required

Health hazards Asp. Tox - 1 STOT SE 3. Environmental hazards Aquatic Chronic 2

Classification according to Directive 1999/45/EC Physical and chemical hazards No classification required

Health hazards Xn Harmful R65 R66 R67. Environmental hazards N R51/53

2.2. Label elements

Labelling according to Regulation (EC) 1272/2008



Signal word(s) DANGER

Hazard class(es) and category(ies) Asp. Tox 1 - STOT SE 3 -Aquatic Chronic 2

Hazard statement(s)

H304: May be fatal if swallowed and enters the airways

H336: May cause drowsiness or dizziness

H411: Toxic to aquatic life with long lasting effects

EUH208: Contains Clethodim. May produce an allergic reaction

EUH066: Repeated exposure may cause skin dryness or cracking

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

Precautionary statements

P101: If medical advice is needed, have product container or label at hand

P102: Keep out of reach of children

P103: Read label before use

P260: Do not breathe vapours/spray

P270: Do not eat drink or smoke when using this product

P271: Use only outdoors or in a well ventilated area.

P273: Avoid release to the environment

P280: Wear protective gloves

P301+P310:IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician

P331: Do NOT induce vomiting

P391: Collect spillage

P501: Dispose of contents/container in accordance with local/national regulations

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).

2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

Chemical name and REACH registration No.	CAS No	EC No.	Classification Directive	Classification Regulation (EC) 1272/2008	Conc (%)
Clethodim	99129-21-2	/	Xn, R22, Xi 38, 43	Acute Tox. 4 - Skin Irrit. 2 - Skin Sens. 1- H302, H315, H317	12-15
Methyl esters of fatty acids	67784-80-9	267-055-2	Xi R36/38	Skin Irrit. 2 - Skin Sens. 1 H315, H317	40-60
Amines, tallow alkyl, ethoxylated, compds. with polyethylene glycol hydrogen sulphate C12-14 alkyl ether	184785-408	/	Xn, N R22, 38, 41, 51/53	Acute Tox. 4 - Skin Irrit. 2; Eye Dam. 1- Aquatic Chronic 2 H302, H315, H318, H411	4-10
Solvent naphta (petroleum) heavy arom.	64742-94-5	265-198-5	Xn, R65, 51/53	Asp. Tox. 1, Aquatic Chronic 2, H304, H411	20-40
1,2,4 trimethylbenzene	95-63-6	202-436-9	Xn, N R20, 36/37/38, 51/53	Acute Tox. 4, Eye Irrit. 2, Skin Irrit. 2, STOT SE 3. Aquatic Chronic 2 H332, H319, H315, H335, H411	< 4
Mesitylene	108-67-8	203-604-4	Xi, N R37, 51/53	STOT SE 3, Aquatic Chronic 2, H335 H411	< 4

CLAYTON PLANT PROTECTION

CLAYTON GATSO Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 1/dsc 8/05/2015

This version replaces all previous versions

Naphthalene	91-20-3	202-049-5	Xn, N R22, 40, 50/53	Carc. 2, Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1. H351, H302, H400, H410	< 0.1
-------------	---------	-----------	----------------------	---	-------

For the complete text of H statements, please refer to section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures In general - Remove the affected person from the danger zone to a well-ventilated room or to fresh air, and protect from chilling. Do not administer anything by oral route and do not try to make vomit, call a treatment centre for poisoning cases or a doctor. Take the label where possible.

After Inhalation Immediately remove to fresh air. Call a doctor immediately.

After eye contact Rinse immediately and thoroughly with plenty of water during at least 10 to 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if pain or redness persists.

After skin contact Remove contaminated clothing and thoroughly wash the affected parts of the body with soap and water.

After Ingestion Call a doctor immediately and show the label. Do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed None.

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

SECTION 5: Fire-fighting measures

5.1. Extinguishing media Suitable: Water spray, foam, dry chemical powder. Unsuitable: Water jet.

5.2. Special hazards arising from the substance or mixture By thermal decomposition, possibility of formation of toxic gases (sulphur oxide, phosphorus oxide, nitrogen oxide, carbon oxide, chlorides).

5.3. Advice for fire-fighters Intervention personnel should wear mask and individual respiratory equipment. Retain water or extinguishing media and eliminate safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective adapted equipment and remove non protected people. Remove any combustion and ignition sources and block bringing in oxygen (ventilation).

6.2. Environmental precautions Avoid sewage, surface water, ground water and soil contamination. Retain spilled liquids and collect them with sand or other absorbent inert material (sepiolite). Absorbent inert material stocks have to be sufficient to face reasonably predictable spillage. Protect sewers from potential spillage to minimize pollution hazards. Do not throw washing water into sewers. Contact competent authorities when a situation cannot be controlled rapidly and efficiently. In the case of spillage into water, stop dispersion of the product with adequate barrier.

6.3. Methods and material for containment and cleaning up. Collect contaminated products on the surface concerned, transfer to closed drums before sending in a specialized incineration treatment centre. Wash the contaminated surface with water and collect washing water for treatment. Cover the contaminated zone using absorbent materials such as sand or sepiolite. See section 8 for personal protection and section 13 for disposal considerations.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling. Do not eat, drink or smoke when using. Wear appropriate protective clothes, adequate gloves (nitril), glasses or mask. Avoid all contact of skin, eyes or clothes with new or old product. Respect good hygienic body conditions and cleanliness of the working area. Wash hands thoroughly after handling. Do not wash working clothes with household cloths

7.2. Conditions for safe storage, including any incompatibilities : Keep away from food, drink and animal feeding stuffs. Store in a well closed container, in a fresh and well ventilated place. Store under cover, in an appropriate place, away from heat and sources of fire, at temperature <35°C. Do not store in room at temperature below -5°C

7.3. Specific end uses /

SECTION 8: Exposure controls/personal protection

8.1. Control parameters Not defined

8.2. Exposure control General measures. Before use refer to information written on the label.

Control of professional exposure Respiratory protection Preferably wear a mask covering all face with filter appropriate to organic vapour, powder or aerosol. A.P. Type filters.

Hand protection Wear impermeable gloves, resistant to organic solvents and to chemical products.

Eye protection Preferably wear a mask, a face screen or protective glasses.

Skin protection Wear appropriate protective clothes, covering all parts of the body.

Control of environment exposure Respect European and National Regulations in term of environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Clear amber liquid	Relative density 0.9247 at 20°C
Odour Aromatic solvent pH 4.4 (1% aqueous solution)	Solubility - Water - Miscible with water in all proportions. Gives stable emulsion
Boiling point / range ND	Solubility - Organic solvents Miscible with almost all organic solvents.
Flash point 74.9°C	
Flammability Not flammable	



CLAYTON PLANT PROTECTION

CLAYTON GATSO Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 1/dsc 8/05/2015

This version replaces all previous versions

Explosives properties Risks of explosion almost none in the recommended conditions of storage see point 7. Real risk in case of fire or accumulation of the emanations Combustive properties ND Vapour pressure ND	Hydrosolubility NA n-octanol/water coefficient NA Viscosity NA Vapour density NA Evaporation rate NA
--	--

9.2. Other information /

SECTION 10: Stability and reactivity

- 10.1. Reactivity Product is not reactive under normal storage conditions
10.2. Chemical stability Stable under recommended conditions for safe storage
10.3. Possibility of hazardous reactions No hazardous reactions known under normal storage conditions
10.4. Conditions to avoid Avoid storage at temperature > 35°C in a confined place.
10.5. Incompatible materials Avoid contact with strong oxidant and strong reducing agent.
10.6. Hazardous decomposition products See section 5.

SECTION 11: Toxicological information

The active ingredient Clethodim is unlikely to be genotoxic based on the available studies, and did not show any carcinogenic potential in rats or mice. In reproductive toxicity studies, no adverse effects were observed in the fertility parameters or in the development of the pups.

Hazard classes1	Asp. Tox 1 - STOT SE
Acute toxicity	
by ingestion (rat)	LD50 > 5000 mg/kg bw
by skin contact (rat)	LD50 > 2000 mg/kg bw
by inhalation (rat)	LC50 (4 h) > 5.51 mg/L air
Skin irritation (rabbit)	Not irritating to skin
Eye irritation (rabbit)	Not irritating to eyes
Skin sensitization (guinea-pig)	Not a skin sensitizer (M&K)
Subchronic toxicity	Oral NOAEL (90 day dog) = 21 mg ai/kg bw/day
Chronic toxicity	
Carcinogenicity	No carcinogenic potential
Teratology	Not teratogen effect
Reproduction (development and fertility)	No effect on development and fertility
Mutagenicity effects	Not mutagen
Other	/

SECTION 12: Ecological information

12.1. Toxicity

Toxicity for aquatic organisms (acute and chronic)	LC50 (96 h) fish (<i>Oncorhynchus mykiss</i>) = 8.98 mg fp/L EC50 (48 h) daphnia (<i>Daphnia magna</i>) = 29.4 mg fp/L ECr50 (72 h) algae (<i>Pseudokirchneriella subcapitata</i>) = 5.73 mg fp/L ECr50 (72 h) algae (<i>Anabaena flos-aquae</i>) = 7.43 mg fp/L NOEC (21 d) fish (<i>Oncorhynchus mykiss</i>) = 3.9 mg ai/L NOEC (21 d) daphnia (<i>Daphnia magna</i>) = 49 mg ai/L
Toxicity for birds (Clethodim)	LD50 bird > 2000 mg as/kg bw (<i>Colinus virginianus</i> , bobwhite quail). LC50 > 1035 mg as/kg bw/day (mallard duck)
Toxicity for bees	LD50 oral > 43 µg ai/bee LD50 contact > 51 µg ai/bee

12.2. Persistence and degradability DT50 : 0.21 – 3.04 days (Clethodim)

12.3. Bioaccumulative potential BCF factor (clethodim) = 2.1 L/kg wwt (Clethodim)

12.4. Mobility in soil Not a leaching compound (Clethodim)

12.5. Results of PBT and vPvB assessment Not a PBT nor A vPvB (Clethodim)

12.6. Other adverse effects No other adverse effects known (Clethodim)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/packaging - Disposal of important amounts must be made by duly authorized specialists. Incineration should be made in authorized and specialized plant. Eliminate the product and its packaging with care and in a responsible way. Do not throw near ponds, rivers, ditches or into sewers. Wash contaminated surfaces with water and collect washing waters for treatment. Make sure that local Regulations are respected.

Washing products - Do not throw into sewer. Do not contaminate natural waters. Wash application machinery in the treated area and dispose of washings by spraying in the treated area.

SECTION 14: Transport information

Regulation	RID/ADR (Terrestrial)	IMDG (Maritime)	OACI/IATA (Aerial)
UN code	3082	3082	3082
Class	9	9	9
Specific point / code	M6		
Packing group	III	III	III
Environmental hazard classes		N	

CLAYTON PLANT PROTECTION

CLAYTON GATSO Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 1/dsc 8/05/2015

This version replaces all previous versions

Wording	Environmentally hazardous substance, liquid, n.o.s (Clethodim)
---------	--

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture
Information regarding relevant Community safety, health and environmental provisions.

Clethodim is not affected by the following regulations: -

Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer.

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

Regulation (EC) No 689/2008 of the European Parliament and of the Council of 17 June 2008 concerning the export and import of dangerous chemicals)

Other prescriptions To avoid risks to man and the environment, comply with the instructions for use (Directive 1999/45/EC, Article 10, n° 12).

15.2. Chemical safety assessment

Any Chemical Safety Assessment has been carried out for this mixture. This mixture is registered as a plant protection product under 91/414/EC directive, replaced by Regulation (EC) No. 1107/2009. Refer to the label for exposure assessment information.

SECTION 16: Other information

Full text of H statements of dangerous substances according to the CLP/GHS classification (written in section 3)

H302: Harmful if swallowed	Full text of R phrases referred to in Sections 2 and 3
H304: May be fatal if swallowed and enters airways	R20 Harmful by inhalation
H315: Causes skin irritation	R22 Harmful if swallowed
H317: May cause an allergic skin reaction	R36 Irritating to eyes
H318: Causes serious eye damage	R37 Irritating to respiratory system
H319: Causes serious eye irritation	R38 Irritating to skin
H332: Harmful if inhaled H335: May cause respiratory irritation	R40 Limited evidence of a carcinogenic effect
H351: Suspected of causing cancer	R41 Risk of serious damage to eyes
H400: Very toxic to aquatic life	R43 May cause sensitisation by skin contact
H410: Very toxic to aquatic life with long lasting effects	R50/53 Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment
H411: Toxic to aquatic life with long lasting effects	R51/53 Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment
	R52/53 Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment
	R65 Harmful: may cause lung damage if swallowed
	R66 Repeated exposure may cause skin dryness and cracking
	R67 Vapours may cause drowsiness and dizziness

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.