Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 2/dsc 27/07/2016 This version replaces all previous versions

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

1.1. Product identifier Clayton Gatso

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.claytonpp.com
 Email: info@claytonpp.com

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	CAS No	EC No.	Classification	Classification Regulation (EC) 1272/2008	Conc
registration No.			Directive		(%)
			67/548/EC		
Clethodim	99129-21-2	/	Xn, R22, Xi 38,	Acute Tox. 4 - Skin Irrit. 2 - Skin Sens. 1-	12-15
			43	H302, H315, H317	
Methyl esters of fatty acids	67784-80-9	267-	Xi R36/38	Skin Irrit. 2 - Skin Sens. 1 H315, H317	40-60
		055-2			
Amines, tallow alkyl, ethoxylated,	184785-408	/	Xn, N R22, 38,	Acute Tox. 4 - Skin Irrit. 2; Eye Dam.	4-10
compds. with polyethylene glycol			41, 51/53	1- Aquatic Chronic 2 H302, H315,	
hydrogen sulphate C12-14 alkyl				H318, H411	
ether					
Solvent naphta (petroleum) heavy	64742-94-5	265-	Xn, R65, 51/53	Asp. Tox. 1, Aquatic Chronic 2, H304,	20-40
arom.		198-5		H411	



Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 2/dsc 27/07/2016 This version replaces all previous versions

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
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.



Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 2/dsc 27/07/2016 This version replaces all previous versions

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
Flash point 74.9°C	
Flammability Not flammable	all organic solvents.

Explosives properties Risks of explosion almost none in the	Hydrosolubility NA	
recommended conditions of storage see point 7. Real risk in	n-octanol/water coefficient NA	
case of fire or accumulation of the emanations	Viscosity NA	
Combustive properties ND	Vapour density NA	
Vapour pressure ND	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  $> 35^{\circ}$ 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.

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

SECTION 12: Ecological information

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

# CLAYTON

Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 2/dsc 27/07/2016 This version replaces all previous versions

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



Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 2/dsc 27/07/2016 This version replaces all previous versions

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,  $n^{\circ}$  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 R20 Harmful by inhalation H304: May be fatal if swallowed and enters airways 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 R40 Limited evidence of a carcinogenic effect irritation R41 Risk of serious damage to eyes H351: Suspected of causing cancer H400: R43 May cause sensitisation by skin contact Very toxic to aquatic life R50/53 Very toxic to aquatic organisms. May cause long-term H410: Very toxic to aquatic life with long lasting adverse effects in the aquatic environment effects R51/53 Toxic to aquatic organisms. May cause long-term adverse H411: Toxic to aquatic life with long lasting effects 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.

# **CLAYT®N**