

CLAYTON PLANT PROTECTION

CLAYTON MAXIMUS Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 1/dsc 18/05/2017. This version replaces all previous versions.

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

1.1. Product identifier CLAYTON MAXIMUS

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 (EU) 1272/2008

Reproduction toxicity Category 2 H361d

Acute aquatic toxicity Category 1 H400

Chronic aquatic toxicity Category 2 H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms



Signal Word : Warning

Hazard Statements

H361d Suspected of damaging the unborn child

H410 Very toxic to aquatic life with long lasting effects Precautions

Statements :

P102 Keep out of reach of children P201

Obtain special instructions before use

P280 Wear protective gloves/protective clothing.

P308/P313 IF exposed or concerned: 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 for as non-hazardous waste.

Supplemental Information :

EUH401 Contains fluazifop-P-butyl. May produce an allergic reaction. To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label: • Fluazifop-p-butyl 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 (REGULATION (EC) No. 1272/2008	Concentration
Fluazifop-p-butyl	79241-46-6	Skin Sens.1; H317 Repr.2; H361d Aquatic Acute1; H400 Aquatic Chronic1; H410	13.4 % w/w
(E)-18-ethoxyoctadec-3ene	68920-66-1	Skin Irrit.2; H315	20 – 30 %w/w
Octan-1-ol	111-87-5 203-917-6 01-2119486978-100005	Eye Irrit.2; H319 Aquatic Chronic 3; H412	5 – 15 % w/w
Calcium dodecyl benzene sulphonate	26264-06-2 90194-26-6 247-557-8	Skin Irrit.2; H315 Eye Dam.1; H318	1 – 5 % w/w

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2-methylpropan-1-ol	78-83-1 201-148-0 01- 2119484609-230012	Flam. Liq.3; H226 STOT SE3; H335 Skin Irrit.2; H315 Eye Dam.1; H318 STOT SE3; H336	1 – 5 % w/w
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Substances for which there are Community workplace exposure limits. 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: contains petroleum distillates and/or aromatic solvents.

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). If the product contaminates rivers and lakes or drains inform respective authorities.

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 product: 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

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Components	Exposure limit(s)	Type of exposure limit	Source
Fluazifop-p-butyl	0.5 mg/m ³	8 h TWA	SYNGENTA
2-methylpropan-1-ol	1,600 ppm 50 ppm 100 ppm 50 ppm 100 ppm 50 ppm, 231 mg/m ³	8 h TWA 15 min STEL 8 h TWA 8 h TWA 8 h TWA	NIOSH SUVA SUVA ACGIH DFG UK HSE

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 dust is 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 : A combination gas, vapour and particulate filter respirator may be necessary until effective technical measures are installed. Protection provided by air-purifying respirators is limited. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

Hand protection : Chemical resistant gloves should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure. The breakthrough time of gloves varies according to the thickness, material and manufacturer. Gloves should be changed when breakthrough is suspected. Suitable material: nitrile rubber.

Eye protection : Eye protection is not usually required. Follow any site specific eye protection policies.

Skin and body protection : Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before reuse, or use disposable equipment (suits, aprons, sleeves, boots, etc.). Wear as appropriate: impervious protective suit.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State : Liquid	Vapour pressure : No data available
Form : Clear to slightly turbid liquid	Relative vapour density : No data available
Colour : Brown	Density : 0.936 g/cm ³ at 20 °C
Odour : Like alcohol, weak	Solubility in other solvents : No data available
Odour Threshold : No data available pH : 4 – 8 at 1 % w/v (20 – 25 °C) (as a dispersion)	Partition Coefficient n-octanol/water : No data available
Melting point/range : No data available	Autoignition temperature : 440 °C
Boiling point/boiling range : No data available	Thermal decomposition : No data available
Flash point : 84 °C	Viscosity, dynamic : 51.6 mPa.s at 20°C 20.6 mPa.s at 40°C
Evaporation rate : No data available	Viscosity, kinematic : 22.3 mm ² /s at 40°C 54.8 mm ² /s at 20°C
Flammability (solid, gas) : No data available	Explosive properties : Not explosive
Lower explosion limit : No data available	Oxidizing properties : Not oxidising
Upper explosion limit : No data available	

9.2 Other information : Miscibility : Miscible Surface tension : 30.8 mN/m at 25 °C

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

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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 :	LD50male and female rat, > 2,000 mg/kg
Acute inhalational toxicity :	Acute toxicity estimate, > 5.0 mg/l, 4 h
Acute dermal toxicity :	LD50 male and female rat, > 2,000 mg/kg
Skin corrosion/irritation :	Rabbit: mildly irritating
Serious eye damage/eye irritation :	Rabbit: mildly irritating
Respiratory or skin sensitisation :	Guinea pig: slightly sensitising
Germ cell mutagenicity fluazifop-p-butyl (E)-18ethoxyoctadec-3-ene octan-1-ol 2-methylpropan-1-ol	Did not show mutagenic effects in animal experiments. Not mutagenic in Ames Test. Not mutagenic in Ames Test. Did not show mutagenic effects in animal experiments.
Carcinogenicity fluazifop-p-butyl 2-methylpropan-1-ol	Did not show carcinogenic effects in animal experiments.
Teratogenicity fluazifop-p-butyl	Did not show carcinogenic effects in animal experiments
Reproductive toxicity fluazifop-p-butyl octan-1-ol 2-methylpropan-1-ol	Did not show teratogenic effects in animal experiments
STOT – single exposure 2-methylpropan-1-ol	Did not show reproductive toxicity effects in animal experiments No toxicity to reproduction.
STOT – repeated exposure fluazifop-p-butyl 2-methylpropan-1-ol	Did not show reproductive toxicity effects in animal experiments May cause drowsiness or dizziness 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 *Oncorhynchus mykiss* (rainbow trout), 20 mg/l, 96 h
Toxicity to aquatic invertebrates : EC50 *Daphnia magna* (water flea), 20 mg/l, 48 h
Toxicity to aquatic plants : EbC50 *Pseudokirchneriella subcapitata* (green algae), 0.184 mg/l, 72 h
ErC50 *Pseudokirchneriella subcapitata* (green algae), 0.672 mg/l, 72 h

12.2 Persistence and degradability

Stability in water fluazifop-p-butyl Degradation half- life: 1.5 – 1.7 h. Not persistent in water

Stability in soil fluazifop-p-butyl : Degradation half- life: < 2 d. Not persistent in soil

12.3 Bioaccumulative potential fluazifop-p-butyl : Does not bioaccumulate.

12.4 Mobility in soil fluazifop-p-butyl : Immobile in soil

12.5 Results of PBT and vPvB assessmen fluazifop-p-butyl, octan-1-ol : These substances are not considered to be persistent, bioaccumulating nor toxic (PBT). These substances are not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects : Classification of the product is based on the summation of the concentrations of classified components.

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

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14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FLUAZIFOP-P-BUTYL)

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. (FLUAZIFOP-P-BUTYL)

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. (FLUAZIFOP-P-BUTYL)

14.3 Transport hazard class(es) : 9

14.4 Packing Group ; III

Labels : 9

14.6 Special precautions for user : none

14.6 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

H227 Combustible liquid

H316 Causes mild irritation

H361d Suspected of damaging the unborn child

H410 Very toxic to aquatic life with long lasting effects

Precautions Statements

P102 Keep out of reach of children P201

Obtain special instructions before use

P280 Wear protective.

P308/P313 IF exposed or concerned: 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 for 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: • Fluazifop-p-butyl

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

SECTION 16: OTHER INFORMATION

Further information

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

H226 Flammable liquid and vapour

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H318 Causes serious eye damage H319

Causes serious eye irritation

H335 May cause respiratory irritation

H336 May cause drowsiness or dizziness.

H361d Suspected of damaging the unborn child

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

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	H412 Harmful to aquatic life with long lasting effects.
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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.