CLAYTON PLANT PROTECTION
CLAYTON MIZEN Safety Data Sheet according to Regulation (EU) No. 1907/2006. Version 1/dsc 08/05/2019
This version replaces all previous versions

SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier CLAYTON MIZEN
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 in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.
Acute aquatic toxicity: Category 1
H400 Very toxic to aquatic life.
Chronic aquatic toxicity: Category 1
H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements
Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended. Hazard label for supply/use required.

Hazardous pictogram:
Signal word: Warning

Hazard statements
H410 Very toxic to aquatic life with long lasting effects.
EU Hazard Statements
EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements
P102 Keep out of reach of children
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.
2.3 Other hazards No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
3.2 Mixtures Chemical nature Water Dispersible Granule (WG) Metribuzin (700g/Kg)
Composition Information:

Name	CAS-No. / EC-No	Classification Regulation (EC) No 1272/2008.	Conc. [%]
Metribuzin	21087-64-9/ 244-209-7	Acute Tox. 4, (H302) H400 Aquatic Chronic 1, (H410) H410 Aquatic Acute 1, (H400)	66 - 74
Reaction product of naphthalene, IPA, sulfonated, Na salt	939-368-0 (EC No.)	Acute Tox. 4 (H302), Acute Tox. 4 (H332), Eye Dam. 1 (H318), STOT SE 3 (H335)	1 - 3
Citric acid monohydrate	5949-29-1	Eye Irrit. 2, (H319)	< 2
Disodium Maleate	371-47-1	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	< 2

Further information For the full text of the R-phrases/ Hazard statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES
4.1 Description of first aid measures
General advice : Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely
Inhalation : Move to fresh air. Keep patient warm and at rest. Call a physician or poison control centre immediately. If not breathing, administer CPR.
Skin contact : Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.
Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists

Ingestion : Call a physician or poison control centre immediately. Rinse mouth. Induce vomiting only, if: 1. patient is fully conscious, 2. medical aid is not readily available, 3. a significant amount (more than a mouthful) has been ingested and 4. time since ingestion is less than 1 hour. (Vomit should not get into the respiratory tract.)
4.2 Most important symptoms and effects, both acute and delayed : Symptoms : None known.
4.3 Indication of any immediate medical attention and special treatment needed
Treatment : Treat symptomatically. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.

SECTION 5: FIREFIGHTING MEASURES
5.1 Extinguishing media
Suitable : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable : No information available
5.2 Special hazards arising from the substance or mixture : No specific hazards known
5.3 Advice for firefighters In the event of fire and/or explosion do not breathe fumes. Special protective equipment for fire-fighters In the event of fire, wear self-contained breathing apparatus.
Further information : Contain the spread of the fire-fighting media. Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures
Precautions : Use personal protective equipment as required.
6.2 Environmental precautions : Do not allow to get into surface water, drains and ground water. If spillage enters drains leading to sewage works inform local water company immediately. If spillage enters rivers or watercourses, inform the Environment Agency (UK emergency telephone number 0800 807060).
6.3 Methods and materials for containment and cleaning up : Take up mechanically, placing in appropriate containers for disposal
Additional advice : Use personal protective equipment. Do not allow to enter soil, waterways or waste water.
6.4 Reference to other sections - Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE
7.1 Precautions for safe handling
Advice on safe handling Avoid generation of dust. Use PPE as required. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before re-use. Do not breathe dust/spray. Do not eat, drink or smoke when using this product
Advice on protection against fire and explosion No special precautions required.
Hygiene measures Avoid contact with skin, eyes and clothing. Keep working clothes separately. Remove soiled clothing immediately and clean thoroughly before using again. Do not eat drink or smoke when using. Wash contaminated clothing before re-use.
7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage areas and containers Keep container tightly closed in a dry and well ventilated place. Keep out of reach of children.
7.3 Specific end uses Refer to the label and/or leaflet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1 Control parameters

Components				
Metribuzin	France: TWA: 5mg/m3	Spain: TWA: 5mg/m3	Denmark: TWA: 5mg/m3	Austria STEL 10mg/m3
	Ireland: TWA: 5mg/m3	Portugal: TWA:5 mg/m3	EU: -	TWA 5 mg/m3
	UK: -	Italy : -	Finland : -	Netherlands:

8.2 Exposure controls
Refer to COSHH assessment (Control of Substances Hazardous to Health (Amendment) Regulations 2004).
Engineering controls should be used in preference to personal protective equipment wherever practicable. Refer also to COSHH Essentials.
Personal protective equipment
In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.
Respiratory protection Respiratory protection is required in uses where there is insufficient ventilation.
Hand protection Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness of 0,4 mm). Wash when contaminated and dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet
Eye protection Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).
Skin and body protection Wear standard coveralls and Category 3 Type 4 suit.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties

Form Granular Solid	Flash point -
Colour Beige	Density -
Odour Characteristic	Water solubility Dispersible
pH 8.7 - 9.7 (CIPAC MT 75.3)	Partition coefficient: noctanol/water Log PoW: 1.6 (Metribuzin)

9.2 Other information - Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY
10.1 Reactivity Thermal decomposition Stable under normal conditions.
10.2 Chemical stability Stable under recommended storage conditions
10.3 Possibility of hazardous reactions No hazardous reactions when stored and handled according to prescribed instructions.
10.4 Conditions to avoid Heat flames and sparks
10.5 Incompatible materials Store only in the original container.
10.6 Hazardous decomposition products No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects
Acute oral toxicity LD50 (rat) >2,000 mg/kg
Acute inhalation toxicity LC50 (rat) > 4.8 mg/l Exposure time: 4 h
Acute dermal toxicity LD50 (rat) > 2,000 mg/kg
Skin irritation No skin irritation (rabbit)
Eye irritation No eye irritation (rabbit)
Sensitisation Non-sensitizing. (Guinea pig) OECD Test Guideline 406
Assessment repeated dose toxicity No data available
Assessment Mutagenicity Not classified as a mutagen
Assessment Carcinogenicity Not carcinogenic
Assessment toxicity to reproduction Not toxic to reproduction
Assessment developmental toxicity No Data available

SECTION 12: ECOLOGICAL INFORMATION
12.1 Toxicity
Toxicity to fish LC50 Oncorrhynchus mykiss >100mg/l Exposure time: 96 h
Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) >100 mg/l Exposure time: 48 h
Toxicity to aquatic plants EC50 (D.Subspicatus) 0.0867mg/l Growth rate; Exposure time: 72 h
12.2 Persistence and degradability - Biodegradability Metribuzin: Abiotic degradation water DT50 (days): 31.1 - 52.6 Koc Metribuzin: 3.14 - 81.5
12.3 Bioaccumulative potential - Bioaccumulation Metribuzin: Bioconcentration factor not available
12.4 Mobility in soil Koc: 3.14 - 81.5
12.5 Results of PBT and vPvB assessment PBT and vPvB assessment. The components in this formulation do not meet the criteria for classification as PBT or vPvB.
12.6 Other adverse effects Additional ecological information

SECTION 13: DISPOSAL CONSIDERATIONS
13.1 Waste treatment methods
Product - In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant. Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).
Contaminated packaging - Small containers (< 10 l or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times. Add washings to sprayer at time of filling. Dispose of empty and cleaned packaging safely. Large containers (> 25 l or > 25 kg) should not be rinsed or re-used for any other purpose. Return large containers to supplier. Follow advice on product label and/or leaflet.
Waste key for the unused product - 020108 agrochemical waste containing dangerous substances

SECTION 14: TRANSPORT INFORMATION
ADR/RID/ADN
14.1 UN number 3077
14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metribuzin) 9 III YES
14.3 Transport hazard class(es) 90
14.4 Packing group III
14.5 Environm. Hazardous Mark YES
Hazard no. 90
Tunnel Code E
This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

IMDG 1
14.1 UN number 3077
14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metribuzin)
14.3 Transport hazard class(es) 9
14.4 Packing group III
14.5 Marine pollutant

IATA
14.1 UN number 3077
14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metribuzin)
14.3 Transport hazard class(es) 9
14.4 Packing group III
14.5 Environm. Hazardous Mark YES

UK 'Carriage' Regulations
14.1 UN number 3077
14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metribuzin)
14.3 Transport hazard class(es) 9
14.4 Packing group III
14.5 Environm. Hazardous Mark YES
Emergency action code 3Z

14.6 Special precautions for user See sections 6 to 8 of this Safety Data Sheet.
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
UK and Northern Ireland Regulatory References
This material may be subject to some or all of the following regulations (and any subsequent amendments). Users must ensure that any uses and restrictions as indicated on the label and/or leaflet are followed.
Transport
Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No 1348) Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 (SI 1997 No 2367) Air Navigation Dangerous Goods Regulations 2002 (SI 2002 No 2786)
Supply and Use
Chemical (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No 716) Chemical (Hazard Information and Packaging for Supply) (Northern Ireland) Regulations 2009 Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No 2677) EH40 Occupational Exposure Limits - Table 1 List of approved workplace exposure limits Control of Pesticide Regulations 1986 Dangerous Substances and Explosive Atmospheres Regulations 2002
Waste Treatment
Environmental Protection Act 1990, Part II Environmental Protection (Duty of Care) Regulations 1991 The Waste Management Licensing Regulations 1994 (as amended) Hazardous Waste Regulations 2005 (Replacing Special Waste Regulations 1996 as amended) Landfill Directive Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94) Water Resources Act 1991 Anti-Pollution Works Regulations 1999
15.2 Chemical Safety Assessment. A chemical safety assessment is not required as a risk assessment has been performed according to directive 1107/2009.

SECTION 16: OTHER INFORMATION
Text of the hazard statements mentioned in Section 3

H302 Harmful if swallowed.	H315 Causes skin irritation	H319 Causes serious eye irritation
H332 Harmful if inhaled	H335 May cause respiratory irritation	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.