

**Trade name:** CROWN MH**Product no.:** KE 030 C1532 IRE**Current version :** 1.0.1, issued: 19.11.2020**Replaced version:** 1.0.0, issued: 27.02.2020**Region:** IE**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name****CROWN MH****1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**

Plant protection product

Growth regulator

**Uses advised against**

No data available.

**1.3 Details of the supplier of the safety data sheet****Address**

Certis Europe B.V. - United Kingdom

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Granta Park - Great Abington

Cambridgeshire CB21 6AD

United Kingdom

Telephone no. +44 (0) 1223 894 261

Fax no. +44 (0)1223 891210

e-mail info@certiseurope.co.uk - www.certiseurope.co.uk

**Advice on Safety Data Sheet**

certis@certiseurope.co.uk

**1.4 Emergency telephone number**

For further advice for medical professionals:

The National Poisons Information Service: -44 (0) 870 600 6266.

For further advice for veterinary surgeons: -44 (0) 20 7635 9195

Dublin – National Poisons Information Centre, Beaumont Hospital, Dublin 9:

Available from 8 am to 10pm – 7 days: +353 (01) 809 2166

Available 24hrs: +353(01)809 2566

Carechem 24 GB: +44 870 190 6777

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Aquatic Chronic 2; H411

**Classification information**

Classification and labelling are based on toxicological studies performed on the product (mixture).

Classification and labelling with respect to water pollution risks are based on ecotoxicological studies performed on the product (mixture).

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

**Trade name:** CROWN MH**Product no.:** KE 030 C1532 IRE**Current version :** 1.0.1, issued: 19.11.2020**Replaced version:** 1.0.0, issued: 27.02.2020**Region:** IE

GHS09

**Signal word**

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**Hazard statement(s)**

H411 Toxic to aquatic life with long lasting effects.

**Hazard statements (EU)**

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

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

**Precautionary statement(s)**

P391 Collect spillage.

P501 Dispose of contents/ container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty clean containers which can be disposed of as non-hazardous waste.

**2.3 Other hazards**

No data available.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable. The product is not a substance.

**3.2 Mixtures****Chemical characterization**

Maleic hydrazide 270 g/l (SL)

**Hazardous ingredients**

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration
			%
1	<b>pyridazine-3,6(1H,2H)-dione</b>		
	123-33-1 204-619-9 - -	-	>= 10,00 - < 25,00 wt%
2	<b>1,2-benzisothiazol-3(2H)-one</b>		
	2634-33-5 220-120-9 613-088-00-6 -	Acute Tox. 4*; H302 Aquatic Acute 1; H400 Eye Dam. 1; H318 Skin Irrit. 2; H315 Skin Sens. 1; H317	>= 0,05 - < 1,00 wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

(\*, \*\*, \*\*\*, \*\*\*\*) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
2	-	Skin Sens. 1; H317: C >= 0,05%	-	-

**SECTION 4: First aid measures****4.1 Description of first aid measures****General information**

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

**After inhalation**

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you

**Trade name:** CROWN MH**Product no.:** KE 030 C1532 IRE**Current version :** 1.0.1, issued: 19.11.2020**Replaced version:** 1.0.0, issued: 27.02.2020**Region:** IE

feel unwell.

**After skin contact**

Take off contaminated clothing. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**After eye contact**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**After ingestion**

Rinse mouth. Call a POISON CENTER or doctor/physician.

**4.2 Most important symptoms and effects, both acute and delayed**

No data available.

**4.3 Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Alcohol-resistant foam; Carbon dioxide; Extinguishing powder; Water spray jet

**Unsuitable extinguishing media**

High power water jet

**5.2 Special hazards arising from the substance or mixture**In the event of fire, the following can be released: Carbon dioxide (CO<sub>2</sub>); Carbon monoxide (CO); chlorine compounds; Nitrogen oxides (NO<sub>x</sub>)**5.3 Advice for firefighters**

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations. Wear protective clothing. Cool closed containers exposed to fire with water. Use self-contained breathing apparatus.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

**For emergency responders**

Personal protective equipment (PPE) - see section 8.

**6.2 Environmental precautions**

Do not discharge into the drains/surface waters/groundwater. Do not discharge uncontrolled into the subsoil/soil. In case of entry into waterways, soil or drains, inform the responsible authorities.

**6.3 Methods and material for containment and cleaning up**

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). When collected, handle material as described under the section heading "Disposal considerations".

**6.4 Reference to other sections**

Information regarding waste disposal, see section 13. Information regarding personal protective measures, see section 8. Information regarding safe handling, see section 7.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling****Advice on safe handling**

No special measures necessary if stored and handled as prescribed. Provide good ventilation at the work area (local

**Trade name:** CROWN MH**Product no.:** KE 030 C1532 IRE**Current version :** 1.0.1, issued: 19.11.2020**Replaced version:** 1.0.0, issued: 27.02.2020**Region:** IE

exhaust ventilation, if necessary). To be used only according to instructions for use.

**General protective and hygiene measures**

Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately. Do not inhale vapours.

**Advice on protection against fire and explosion**

No special measures necessary.

**7.2 Conditions for safe storage, including any incompatibilities****Technical measures and storage conditions**

Keep container tightly closed and dry in a cool, well-ventilated place. Keep from freezing. Protect from heat and direct sunlight. Store in a dark place. Recommended storage temperature: room temperature.

**Requirements for storage rooms and vessels**

Containers which are opened must be carefully closed and kept upright to prevent leakage. Keep only in the original container.

**Incompatible products**

Do not store together with foodstuffs. Do not store together with food, beverages and animal feeds

**7.3 Specific end use(s)****Industry solution**

Always read the label and product information before use.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters**

No parameters available for monitoring.

**8.2 Exposure controls****Appropriate engineering controls**

No data available.

**Personal protective equipment****Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

**Eye / face protection**

Safety glasses (EN 166)

**Hand protection**

In case of intensive contact, wear protective gloves (EN 374). Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material nitrile rubber

**Other**

Chemical-resistant work clothes. Rubber boots. (EN 13832-3/EN ISO 20345)

**Environmental exposure controls**

No data available.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

<b>Form/Colour</b>
liquid
yellow
<b>Odour</b>
odourless

**Trade name:** CROWN MH**Product no.:** KE 030 C1532 IRE**Current version :** 1.0.1, issued: 19.11.2020**Replaced version:** 1.0.0, issued: 27.02.2020**Region:** IE

<b>Odour threshold</b>	
No data available	

<b>pH value</b>	
Value	7,45
Source	Manufacturer

<b>Boiling point / boiling range</b>	
Value	104 °C
Source	Manufacturer

<b>Melting point / melting range</b>	
No data available	

<b>Decomposition point / decomposition range</b>	
No data available	

<b>Flash point</b>	
Value	> 60 °C
Source	Manufacturer

<b>Auto-ignition temperature</b>	
No data available	

<b>Oxidising properties</b>	
not oxidizing	

<b>Explosive properties</b>	
Product does not present an explosion hazard.	

<b>Flammability (solid, gas)</b>	
Not applicable	

<b>Lower flammability or explosive limits</b>	
No data available	

<b>Upper flammability or explosive limits</b>	
No data available	

<b>Vapour pressure</b>	
No data available	

<b>Vapour density</b>	
No data available	

<b>Evaporation rate</b>	
No data available	

<b>Relative density</b>	
Value	1,14
Source	Manufacturer

<b>Density</b>	
No data available	

<b>Solubility in water</b>	
Comments	soluble

<b>Solubility(ies)</b>	
No data available	

<b>Partition coefficient: n-octanol/water</b>	
No data available	

<b>Viscosity</b>	
No data available	

**9.2 Other information**

<b>Other information</b>
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**Trade name:** CROWN MH**Product no.:** KE 030 C1532 IRE**Current version :** 1.0.1, issued: 19.11.2020**Replaced version:** 1.0.0, issued: 27.02.2020**Region:** IE

No data available.

**SECTION 10: Stability and reactivity****10.1 Reactivity**

The product is stable under normal storage and handling conditions.

**10.2 Chemical stability**

Stable under recommended storage and handling conditions (See section 7).

**10.3 Possibility of hazardous reactions**

Dangerous reactions are not to be expected when handling product according to its intended use.

**10.4 Conditions to avoid**

Heat

**10.5 Incompatible materials**

Acids

**10.6 Hazardous decomposition products**Thermal decomposition generates : Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides.**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

Acute oral toxicity			
No	Product Name		
1	CROWN MH		
LD50	>	5000	mg/kg
Species	rat		
Source	Manufacturer		

Acute dermal toxicity			
No	Product Name		
1	CROWN MH		
LD50	>	5000	mg/kg
Species	rat		
Source	Manufacturer		

Acute inhalational toxicity			
No	Product Name		
1	CROWN MH		
LC50	>	2,04	mg/l
Duration of exposure		4	h
State of aggregation	Dust/mist		
Species	rat		
Source	Manufacturer		
Evaluation/classification	Based on available data, the classification criteria are not met (maximum achievable concentration, no mortality).		

Skin corrosion/irritation	
No data available	

Serious eye damage/irritation	
No data available	

Respiratory or skin sensitisation	
No data available	

Germ cell mutagenicity	
No data available	

Reproduction toxicity	
No data available	

**Trade name:** CROWN MH**Product no.:** KE 030 C1532 IRE**Current version :** 1.0.1, issued: 19.11.2020**Replaced version:** 1.0.0, issued: 27.02.2020**Region:** IE**Carcinogenicity**

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration hazard**

No data available

**SECTION 12: Ecological information****12.1 Toxicity****Toxicity to fish (acute)**

No data available

**Toxicity to fish (chronic)**

No data available

**Toxicity to Daphnia (acute)****No | Product Name****1 | CROWN MH**

EC50	>	9,84	ml/l
Duration of exposure		48	h
Species	Daphnia		
Source	Manufacturer		

**Toxicity to Daphnia (chronic)****No | Product Name****1 | CROWN MH**

NOEC		0,95	mg/l
Species	Daphnia		
Source	Manufacturer		

**Toxicity to algae (acute)****No | Product Name****1 | CROWN MH**

ErC50	>	97,8	mg/l
Duration of exposure		72	h
Species	Algae		
Source	Manufacturer		

**Toxicity to algae (chronic)**

No data available

**Bacteria toxicity**

No data available

**12.2 Persistence and degradability****Biodegradability****No | Product Name****1 | CROWN MH**

Source	Manufacturer		
Evaluation	not readily biodegradable		

**12.3 Bioaccumulative potential**

No data available.

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment**

**Trade name:** CROWN MH**Product no.:** KE 030 C1532 IRE**Current version :** 1.0.1, issued: 19.11.2020**Replaced version:** 1.0.0, issued: 27.02.2020**Region:** IE

No data available.

**12.6 Other adverse effects**

No data available.

**12.7 Other information****Other information**

Do not discharge product unmonitored into the environment.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

**Packaging**

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

**SECTION 14: Transport information****14.1 Transport ADR/RID/ADN**

Class	9
Classification code	M6
Packing group	III
Hazard identification no.	90
UN number	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name	pyridazine-3,6(1H,2H)-dione
Tunnel restriction code	-
Label	9
Environmentally hazardous substance mark	Symbol "fish and tree"

**14.2 Transport IMDG**

Class	9
Packing group	III
UN number	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name	pyridazine-3,6(1H,2H)-dione
EmS	F-A, S-F
Label	9
Marine pollutant mark	Symbol "fish and tree"

**14.3 Transport ICAO-TI / IATA**

Class	9
Packing group	III
UN number	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Technical name	pyridazine-3,6(1H,2H)-dione
Label	9
Environmentally hazardous substance mark	Symbol "fish and tree"

**14.4 Other information**

No data available.

**14.5 Environmental hazards**

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

**14.6 Special precautions for user**

No data available.



**Trade name:** CROWN MH**Product no.:** KE 030 C1532 IRE**Current version :** 1.0.1, issued: 19.11.2020**Replaced version:** 1.0.0, issued: 27.02.2020**Region:** IE**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not relevant

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations**

<b>Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)</b>	
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.	
<b>REACH candidate list of substances of very high concern (SVHC) for authorisation</b>	
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.	
<b>Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES</b>	
The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.	No 3
<b>Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances</b>	
This product is subject to Part I of Annex I, risk category:	E2
<b>Other regulations</b>	
Adhere to the national sanitary and occupational safety regulations when using this product.	
<b>Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market</b>	
Regulation (EU) No 547/2011 implementing Regulation (EC) No 1107/2009 as regards labelling requirements for plant protection products	
Annex III	
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).
SPo	Do not enter treated crops/surfaces until the spray deposit is completely dry.

**15.2 Chemical safety assessment**

A chemical safety assessment has not been carried out for this mixture.

**SECTION 16: Other information****Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

**Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)**

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.

**Creation of the safety data sheet**

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This information is based on our present knowledge and experience.

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**Trade name:** CROWN MH

**Product no.:** KE 030 C1532 IRE

**Current version :** 1.0.1, issued: 19.11.2020

**Replaced version:** 1.0.0, issued: 27.02.2020

**Region:** IE

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The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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