

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

1.1. Product identifier

Product form	: Mixture
Product name	: CROWN MH
Product code	: KE 030 C1532
Active ingredient	: Maleic hydrazide

1.2. Relevant identified uses of the substance or mixture and uses advised against

2.1. Relevant identified uses

Main use category	: Plant protection product for professional use. Agriculture.
Use of the substance/mixture	: Growth regulator. For sprout inhibition of potatoes, onions during storage. For the control of volunteer potatoes in succeeding crops.

1.2.2. Uses advised against

No additional information available.

1.3. Details of the supplier of the safety data sheet

Supplier:

Kreglinger Europe nv
Grote Markt 7
2000 Antwerpen – BELGIUM

Distributor:

CERTIS UK
Suite 5, 3 Riverside
Granta Park
Great Abington
Cambridgeshire CB21 6AD
United Kingdom
Tel: +44 (0)845 373 0305
Fax: +44 (0)1223 891210
Email: infocertisuk@certiseurope.com
Website: www.certiseurope.co.uk

1.4. Emergency telephone number

Emergency number	: Certis Carechem24 multilingual 24 hours emergency number: +44 (0) 870 190 6777. For advice on medical emergencies, fires, spillages or chemical hazards only –phone: 0870 190 6777. For further advice for medical professionals - The National Poisons Information Service: Tel: 0870 600 6266 (UK only) or Dublin Tel: 0035 3 137 99 64/379966. For further advice for veterinary surgeons: 020 7635 9195.
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aquatic Chronic 2 H411

Full text of hazard classes and H-statements : see section 16

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS09

Signal word (CLP)

: -

Hazard statements (CLP)

: H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (CLP)

 : 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 of as non-hazardous waste.

EUH-statements

 : EUH208 - Contains 1,2-Benzisothiazol-3(2H)-one(2634-33-5). 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.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients
3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	% (w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Maleic Hydrazide	(CAS-No.) 123-33-1 (EC-No.) 204-619-9	25 - 50	Not classified.
1,2-Benzisothiazol-3(2H)-one	(CAS No) 2634-33-5 (EC no) 220-120-9 (EC index no) -	< 0,1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400

Name	Product identifier	Specific concentration limits
1,2-Benzisothiazol-3(2H)-one	(CAS No) 2634-33-5 (EC no) 220-120-9 (EC index no) -	C ≥ 0,05

SECTION 4: First aid measures
4.1. Description of first aid measures

First-aid measures general

: In the event of any complaints or symptoms, avoid further exposure.

First-aid measures after inhalation	: IF INHALED: if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing If symptoms persist call a doctor.
First-aid measures after skin contact	: IF ON SKIN: Wash with plenty of soap and water Remove contaminated clothing and shoes If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Consult an eye specialist.
First-aid measures after ingestion	: IF SWALLOWED: immediately call a POISON CENTER or doctor/physician Never give anything by mouth to an unconscious person.

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

Symptoms/injuries : No information available

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray

Dry chemical powder

Alcohol resistant foam

Carbon dioxide (CO₂).

Unsuitable extinguishing media : Jet of water.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustion or thermal decomposition may generate toxic vapours.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire

Fight fire from safe distance and protected location

Do not breathe fumes

Cool closed containers exposed to fire with water spray

If possible, take the containers out of dangerous zone.

Contain fire-fighting water with dikes or absorbents to prevent migration and entry into sewers or streams.

Protection during firefighting : Wear suitable protective clothing, gloves, eye/face protection and respiratory protection

Wear a self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection.

Emergency procedures : Evacuate area

Ensure adequate ventilation

Avoid direct contact with the substance

Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it

Once absorbed collect spilled material with shovels, buckets and place in closed containers and label properly

Remove as chemical waste, according to national or local legislation

In the event of major spillage:

Contact an expert.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Read label before use

Avoid contact with eyes, skin, nose and mouth

Wear suitable protective clothing, gloves and eye/face protection

Opened containers must be carefully closed and kept upright to avoid leakage.

Hygiene measures : Always wash your hands immediately after handling this product, and once again before leaving the workplace

Contaminated work clothing should not be allowed out of the workplace

Do not eat, drink or smoke when using this product

Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Prevent unauthorised access

Keep locked up and out of the reach of children

Keep in original containers, tightly closed

Keep away from food, drink and animal feedingstuffs

Protect against frost

Keep away from heat and direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls	: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Hand protection	: Wear impervious gloves resistant to chemical. Nitrile rubber.
Eye protection	: Safety goggles or a face shield.
Skin and body protection	: Protective clothing with long sleeves waterproof and resistant to chemicals. Rubber boots.
Respiratory protection	: Wear appropriate respirator for dust / organic vapors.
Hygiene measures	: Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke while handling the product. Clean gloves with soap and water before removing. Wash hands and face with soap and water before eating, drinking smoking and immediately after handling product. Clean equipment, premises and work clothes regularly. Work clothing should remain on the work area and stored separately from street clothes.
Environmental exposure controls	: Discharge into the environment must be avoided. Do not contaminate surface and groundwater.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow.
Odour	: Odorless.
pH	: 7.45
Boiling point	: 104 °C
Flash point	: > 60 °C
Relative density	: 1.14
Explosive properties	: Product is not explosive.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

Acids.

10.6. Hazardous decomposition products

 Thermal decomposition generates : Carbon oxides (CO, CO₂). Nitrogen oxides.

SECTION 11: Toxicological information
11.1. Information on toxicological effects

Acute toxicity : Not classified

CROWN MH	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat	> 2.04 mg/l/4h

Maleic Hydrazide	
LD50 oral rat	3800 mg/kg
LD50 dermal rabbit	> 4000 mg/kg
LC50 inhalation rat	> 20 mg/l/4h

1,2-benzisothiazol-3(2H)-one (2634-33-5)	
LD50 oral rat	> 1020 mg/kg
LD50 dermal rat	> 2000 mg/kg

Skin corrosion/irritation : Not classified
 Serious eye damage/irritation : Not classified
 Respiratory or skin sensitisation : Not classified
 Germ cell mutagenicity : Not classified
 Carcinogenicity : Not classified

Reproductive toxicity : Not classified
 Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information
12.1. Toxicity

CROWN MH	
EC50 Daphnia	> 9.84 ml/l
ErC50 Algae	> 97.8 mg/l
NOEC chronic crustacea	0,95 mg/l

12.2. Persistence and degradability

Not readily biodegradable.

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations
13.1. Waste treatment methods

Dispose according to local regulations.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No. : 3082

UN-No.(IATA) : 3082

14.2. UN proper shipping name

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (maleic hydrazide)

Transport document description : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (maleic hydrazide), 9, III

14.3. Transport hazard class(es)

Class (UN) : 9

Class (IATA) : 9 - Miscellaneous dangerous goods.

Hazard labels (UN) : 9


14.4. Packing group

Packing group (UN) : III

14.5. Environmental hazards

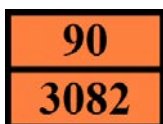
Dangerous for the environment :

Marine pollutant


14.6. Special precautions for user
14.6.1. Overland transport

Hazard identification number (Kemler No.) : 90

Orange plates :


14.6.2. Transport by sea

EmS-No. (1) : F-A

EmS-No. (2) : S-F

14.6.3. Air transport

No additional information available

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Source of information: Safety Data Sheet of Crown MH of Kreglinger Europe. Revised on 05/04/2018. Version: 1.0

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, Category 1
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
H411	Toxic to aquatic life with long lasting effects
EUH208	Contains . 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