

Trade name: Gavel**Product no.:** CE 002 C0030 IRE**Current version :** 1.0.0, issued: 27.06.2019**Replaced version:** -, issued: -**Region:** IE**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name****Gavel****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 for professional use. Agriculture.
Fungicide**Uses advised against**

No data available.

1.3 Details of the supplier of the safety data sheet**Address**Certis Europe (GB)
Suite 5, 3 Riverside
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 1; H410

Carc. 2; H351

Eye Dam. 1; H318

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**

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GHS05



GHS08



GHS09

Signal word

Danger

Hazardous component(s) to be indicated on label:1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole
imazalil (ISO)**Hazard statement(s)**

H318 Causes serious eye damage.
 H351 Suspected of causing cancer
 H410 Very toxic to aquatic life with long lasting effects.

Hazard statements (EU)

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

Precautionary statement(s)

P102 Keep out of reach of children.
 P270 Do not eat, drink or smoke when using this product.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor.
 P363 Wash contaminated clothing before reuse.
 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**Hazardous ingredients**

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole imazalil (ISO)			
	35554-44-0 252-615-0 613-042-00-5 -	Acute Tox. 3; H301 Acute Tox. 4; H332 Aquatic Chronic 1; H410 Carc. 2; H351 Eye Dam. 1; H318	>= 5,00 - < 10,00	%-b.w.
2	sulphuric acid		pls. refer to footnote (1)	
	7664-93-9 231-639-5 016-020-00-8 -	Skin Corr. 1A; H314 Met. Corr. 1; H290	< 5,00	%-b.w.
3	sodium hydroxide			

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	1310-73-2 215-185-5 011-002-00-6 01-2119457892-27	Skin Corr. 1A; H314 Met. Corr. 1; H290 Eye Dam. 1; H318	< 2,50	%-b.w.
4	propane-1,2-diol			
	57-55-6 200-338-0 - 01-2119456809-23	-	< 5,00	%-b.w.

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

(1) Aberrant from/in addition to the classification set out in Annex VI, this substance is classified according to European Regulation (EC) No 1272/2008 (CLP), Article 4 (3), paragraph 2.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	-	-	-	M = 10
2	B	Skin Irrit. 2; H315: C \geq 5% Eye Irrit. 2; H319: C \geq 5% Skin Corr. 1A; H314: C \geq 15%	-	-
3	-	Skin Irrit. 2; H315: C \geq 0,5% Eye Irrit. 2; H319: C \geq 0,5% Skin Corr. 1B; H314: C \geq 2% Skin Corr. 1A; H314: C \geq 5%	-	-

Full text for the notes: pls. see section 16 "Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)".

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

No special measures necessary. In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes and launder thoroughly before reusing.

After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air.

After skin contact

When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

After ingestion

Call a doctor immediately and show label or packaging. Do not induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

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

No data available.

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 (CO₂); Carbon monoxide (CO); Toxic gases/vapours; chlorine compounds; Nitrogen oxides (NO_x); Hydrocarbons

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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.

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.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not uncontrolled discharge into the subsoil/soil.

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 picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections

Information regarding waste disposal, see chapter 13. Information regarding personal protective measures, see chapter 8. Information regarding safe handling, see chapter 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 exhaust ventilation, if necessary).

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.

Storage stability

Value	max.	2	year(s)
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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.

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****Occupational exposure limit values**

No	Substance name	CAS no.	EC no.
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1	propane-1,2-diol	57-55-6	200-338-0
List of Chemical Agents and Occupational Exposure Limit Values (Code of Practice)			
Propane-1,2-diol			
total vapour and particulates			
	WEL long-term (8-hr TWA reference period)	470	mg/m ³ 150 ppm
List of Chemical Agents and Occupational Exposure Limit Values (Code of Practice)			
Propane-1,2-diol			
particulates			
	WEL long-term (8-hr TWA reference period)	10	mg/m ³
2	sulphuric acid	7664-93-9	231-639-5
List of Chemical Agents and Occupational Exposure Limit Values (Code of Practice)			
Sulphuric acid			
	WEL long-term (8-hr TWA reference period)	0.05	mg/m ³
2009/161/EU			
sulphuric acid (mist)			
Mist			
	WEL long-term (8-hr TWA reference period)	0,05	mg/m ³
3	sodium hydroxide	1310-73-2	215-185-5
List of Chemical Agents and Occupational Exposure Limit Values (Code of Practice)			
Sodium hydroxide			
	WEL short-term (15 min reference period)	2	mg/m ³

DNEL, DMEL and PNEC values**DNEL values (worker)**

No	Substance name			CAS / EC no
	Route of exposure	Exposure time	Effect	Value
1	sodium hydroxide			1310-73-2 215-185-5
	inhalative	Long term (chronic)	local	1 mg/m ³

DNEL value (consumer)

No	Substance name			CAS / EC no
	Route of exposure	Exposure time	Effect	Value
1	sodium hydroxide			1310-73-2 215-185-5
	inhalative	Long term (chronic)	local	1 mg/m ³

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.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form/Colour	
liquid	
yellowish	
Odour	
No data available	
Odour threshold	
No data available	
pH value	
Value	4,24
Concentration	1 % aqueous solution
Source	Manufacturer
Boiling point / boiling range	
No data available	
Melting point / melting range	
No data available	
Decomposition point / decomposition range	
No data available	
Flash point	
Value	> 101 °C
Source	Manufacturer
Auto-ignition temperature	
Value	545 °C
Oxidising properties	
not oxidizing	
Explosive properties	
not explosive	
Flammability (solid, gas)	
No data available	
Lower flammability or explosive limits	
No data available	
Upper flammability or explosive limits	
No data available	
Vapour pressure	
No data available	
Vapour density	
No data available	
Evaporation rate	
No data available	
Relative density	
Value	1,074
Density	
No data available	
Solubility in water	
No data available	
Solubility(ies)	
No data available	

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Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole imazalil (ISO)	35554-44-0	252-615-0
log Pow		3,82	
Source		supplier	

Viscosity			
Value	2,292 mPa*s		
Reference temperature	20 °C		
Type	dynamic		
Value	2,142 x 10 exp -6 m ² /s		
Type	kinematic		

9.2 Other information

Other information
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

None known.

10.6 Hazardous decomposition products

In case of fire the following can be released: Toxic gases/vapours; Carbon monoxide and carbon dioxide; Nitrous oxides (NO_x); Hydrocarbons

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity			
No	Product Name		
1	Gavel		
LD50	>	2000	mg/kg
Species	rat		
Source	Manufacturer		

Acute dermal toxicity			
No	Product Name		
1	Gavel		
LD50	>	2000	mg/kg
Species	rabbit		
Source	Manufacturer		

Acute inhalational toxicity			
No	Product Name		
1	Gavel		
LC50	>	5	mg/m ³
Duration of exposure	4 h		
State of aggregation	Dust/mist		

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Species	rat
Source	Manufacturer

Skin corrosion/irritation	
No	Product Name
1	Gavel
Source	Manufacturer
Evaluation	non-irritant

Serious eye damage/irritation	
No	Product Name
1	Gavel
Source	Manufacturer
Evaluation	risk of strong eye injuries

Respiratory or skin sensitisation	
No	Product Name
1	Gavel
Route of exposure	Skin
Source	Manufacturer
Evaluation	non-sensitizing

Germ cell mutagenicity	
No data available	

Reproduction toxicity	
No data available	

Carcinogenicity	
No	Product Name
1	Gavel
Evaluation/classification	Based on available data, the classification criteria are met.

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	Product Name		
1	Gavel		
LC50		20,99	mg/l
Duration of exposure		96	h
Species	Oncorhynchus mykiss		
Source	Manufacturer		

Toxicity to fish (chronic)	
No data available	

Toxicity to Daphnia (acute)			
No	Product Name		
1	Gavel		
EC50		20,306	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Source	Manufacturer		

Toxicity to Daphnia (chronic)	

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No data available

Toxicity to algae (acute)			
No	Product Name		
1	Gavel		
ErC50		3,45	mg/l
Duration of exposure		72	h
Species	Selenastrum capricornutum		
Source	Manufacturer		

Toxicity to algae (chronic)			
No data available			

Bacteria toxicity			
No	Substance name	CAS no.	EC no.
1	sulphuric acid	7664-93-9	231-639-5
EC50		58	mg/l
Duration of exposure		120	h
Species	activated sludge		

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

Bioconcentration factor (BCF)			
No	Substance name	CAS no.	EC no.
1	1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole imazalil (ISO)	35554-44-0	252-615-0
BCF		63,8	
Species	fish		
Source	supplier		

Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole imazalil (ISO)	35554-44-0	252-615-0
log Pow		3,82	
Source	supplier		

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information
Do not discharge product into the environment other than the label use this product is intended for.

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.

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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	1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole imazalil (ISO)
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	1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole imazalil (ISO)
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	1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole imazalil (ISO)
Label	9
Environmentally hazardous substance mark	Symbol "fish and tree"

14.4 Other information

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole = Imazalil

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.

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

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

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.

REACH candidate list of substances of very high concern (SVHC) for authorisation

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.

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Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII.	No 3
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Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is subject to Part I of Annex I, risk category:	E1
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Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.

Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market

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).
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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.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

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 chapter.

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

H290	May be corrosive to metals.
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.

Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)

B Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Department issuing safety data sheet

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This information is based on our present knowledge and experience.

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.

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