

FAZOR

Version 1.5 Revision Date: 17.03.2016 MSDS Number: 000000040391 Country: GB
Language: EN

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name : FAZOR
Product code : 000000040391

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

Use of the Sub-stance/Mixture : Plant growth regulator
Recommended restrictions on use : Agriculture, For professional users only.

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

Company: Arysta LifeScience Great Britain Ltd.
Brooklands Farm, Cheltenham Road
Evesham, Worcestershire
United Kingdom
WR11 2LS
Telephone : +44 1386 425500

Prepared by sds.request@arysta.com

Further information for the safety data sheet :
sds.request@arysta.com

1.4 Emergency telephone number

Emergency telephone number: +44 (0) 1235 239 670 (NCEC)
For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**


Chronic aquatic toxicity, Category 2 H411: Toxic to aquatic life with long lasting effects.

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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:		
Hazard statements	:	H411	Toxic to aquatic life with long lasting effects.
Precautionary statements	:	Prevention: P273	Avoid release to the environment.
		Response: P391	Collect spillage.
		Disposal: P501	Dispose of contents/ container to an approved waste disposal plant.
Supplemental Hazard Statements	:	EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Growth regulator

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
Alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9	Skin Irrit. 2; H315 Eye Irrit. 2; H319	>= 10 - < 20
Alkyl-naphthalene sulfonate, sodium salt	Not Assigned	Eye Irrit. 2; H319	>= 1 - < 10
potassium hydroxide	1310-58-3 215-181-3	Acute Tox. 3; H301 Skin Corr. 1A; H314 Eye Dam. 1; H318	>= 1 - < 2
Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts	68081-81-2 268-356-1	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318	>= 1 - < 5

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

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4.1 Description of first aid measures

- If inhaled : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If not breathing, give artificial respiration.
Call a physician or poison control centre immediately.
If breathing is difficult, give oxygen.
Keep respiratory tract clear.
- In case of skin contact : Wash off with soap and plenty of water.
If symptoms persist, call a physician.
Take off contaminated clothing and wash before reuse.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If eye irritation persists, consult a specialist.
- If swallowed : Rinse mouth with water.
If victim is fully conscious, give a cupful of water.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Never give anything by mouth to an unconscious person.
Do not give milk or alcoholic beverages.
Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : None known.
- Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.
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SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.
Burning produces irritant fumes.
Burning produces noxious and toxic fumes.

5.3 Advice for firefighters

- Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
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Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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

Personal precautions : Use personal protective equipment.
Avoid dust formation.
Avoid breathing dust.
Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water courses.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and arrange disposal without creating dust.
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

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

Advice on safe handling : Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

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.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Plant growth regulator

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

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Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
potassium hydroxide	1310-58-3	STEL	2 mg/m ³	GB EH40

8.2 Exposure controls**Personal protective equipment**

- Eye protection : Eye wash bottle with pure water
 Tightly fitting safety goggles
- Hand protection
 Remarks : Polyvinyl alcohol or nitrile- butyl-rubber gloves The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Before removing gloves clean them with soap and water.
- Skin and body protection : Dust impervious protective suit
 Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.

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

- Appearance : dry, free flowing, water dispersible granules
- Colour : beige
- Odour : very faint
- Odour Threshold : Not relevant
- pH : 8 - 12
- Melting point/freezing point : 304 °C
- Boiling point/boiling range : Not applicable
- Flash point : ≥ 100 °C
 solid
- Relative density : Not applicable
- Solubility(ies)
 Water solubility : soluble
- Viscosity
 Viscosity, dynamic : Not applicable

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Viscosity, kinematic : Not applicable

9.2 Other information

Oxidizing potential : No information available.

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

Stable under recommended storage conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if used as directed.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Product:**

Acute oral toxicity : LD50 (Rat, male and female): 7,500 mg/kg
GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
GLP: yes

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
GLP: yes

Components:**potassium hydroxide:**

Acute oral toxicity : LD50 Oral (Rat): 273 mg/kg

Acute toxicity estimate: 500 mg/kg
Method: Converted acute toxicity point estimate

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Skin corrosion/irritation**Product:**

Species: Rabbit

Result: Mild skin irritation

Remarks: Based on available data, the classification criteria are not met.

Remarks: May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation**Product:**

Species: Rabbit

Assessment: No eye irritation

Result: No eye irritation

Remarks: Based on available data, the classification criteria are not met.

Remarks: Product dust may be irritating to eyes, skin and respiratory system.

Respiratory or skin sensitisation**Product:**

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

Remarks: No data available

Germ cell mutagenicity**Product:**

Germ cell mutagenicity- Assessment : Based on available data, the classification criteria are not met.

Carcinogenicity**Product:**

Carcinogenicity - Assessment : Based on available data, the classification criteria are not met.

Reproductive toxicity**Product:**

Reproductive toxicity - Assessment : Based on available data, the classification criteria are not met.

STOT - single exposure**Product:**

Assessment: Based on available data, the classification criteria are not met.

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STOT - repeated exposure**Product:**

Assessment: Based on available data, the classification criteria are not met.

Further information**Product:**

Remarks: No data available

SECTION 12: Ecological information**12.1 Toxicity****Product:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 130.8 mg/l
Exposure time: 96 h
GLP: yes

NOEC (Oncorhynchus mykiss (rainbow trout)): 111.3 mg/l
Exposure time: 96 h
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : NOEC (Daphnia magna (Water flea)): 207.2 mg/l
Exposure time: 48 h
GLP: yes

EC50 (Daphnia magna (Water flea)): 244 mg/l
Exposure time: 48 h
GLP: yes

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (microalgae)): 445.2 mg/l
Exposure time: 72 h
GLP: yes

NOEC (Pseudokirchneriella subcapitata (microalgae)): 179.6 mg/l
Exposure time: 72 h
GLP: yes

EC50 (Myriophyllum aquaticum (aquatic macrophyte plant)): 12.3 mg/l
Exposure time: 7 d
GLP: yes

NOEC (Myriophyllum aquaticum (aquatic macrophyte plant)): 3.2 mg/l
Exposure time: 7 d
GLP: yes

EC50 (Myriophyllum aquaticum (aquatic macrophyte plant)): 54.4 mg/l

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Exposure time: 4 d
GLP: yes

NOEC (Myriophyllum aquaticum (aquatic macrophyte plant)):
10.0 mg/l
Exposure time: 4 d
GLP: yes

Toxicity to fish (Chronic toxicity) : NOEC: 30 mg/l
Exposure time: 21 d
Species: Oncorhynchus mykiss (rainbow trout)
GLP: yes

LC50: > 88 mg/l
Exposure time: 21 d
Species: Oncorhynchus mykiss (rainbow trout)
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC50: 110 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
GLP: yes

NOEC: 0.95 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
GLP: yes

12.2 Persistence and degradability**Product:**

Biodegradability : Remarks: No data available

Remarks: No data available

12.3 Bioaccumulative potential**Product:**

Bioaccumulation : Remarks: No data available

Remarks: No data available

12.4 Mobility in soil**Product:**

Mobility : Remarks: No data available

Remarks: No data available

12.5 Results of PBT and vPvB assessment**Product:**

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Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects**Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
 Toxic to aquatic life with long lasting effects.

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

Product : Dispose of wastes in an approved waste disposal facility.
 The product should not be allowed to enter drains, water courses or the soil.
 In accordance with local and national regulations.
 Do not dispose of waste into sewer.
 Do not contaminate ponds, waterways or ditches with chemical or used container.

Contaminated packaging : Dispose of as unused product.
 Empty containers should be taken to an approved waste handling site for recycling or disposal.
 Do not re-use empty containers.

SECTION 14: Transport information**14.1 UN number**

ADN : UN 3077
 ADR : UN 3077
 RID : UN 3077
 IMDG : UN 3077
 IATA : UN 3077

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 (Isotridecyl alcohol ethoxylate, 1,2-dihydropyridazine-3,6-dione, potassium salt)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 (Isotridecyl alcohol ethoxylate, 1,2-dihydropyridazine-3,6-dione, potassium salt)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 (Isotridecyl alcohol ethoxylate, 1,2-dihydropyridazine-3,6-

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IMDG : dione, potassium salt)
 : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 (Isotridecyl alcohol ethoxylate, 1,2-dihydropyridazine-3,6-dione, potassium salt)

IATA : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., Environmentally hazardous substance, solid, n.o.s.
 (Isotridecyl alcohol ethoxylate, 1,2-dihydropyridazine-3,6-dione, potassium salt)

14.3 Transport hazard class(es)

ADN : 9
ADR : 9
RID : 9
IMDG : 9
IATA : 9

14.4 Packing group

ADN
 Packing group : III
 Classification Code : M7
 Hazard Identification Number : 90
 Labels : 9

ADR
 Packing group : III
 Classification Code : M7
 Hazard Identification Number : 90
 Labels : 9
 Tunnel restriction code : (E)

RID
 Packing group : III
 Classification Code : M7
 Hazard Identification Number : 90
 Labels : 9

IMDG
 Packing group : III
 Labels : 9
 EmS Code : F-A, S-F

IATA
 Packing instruction (cargo aircraft) : 956
 Packing instruction (passenger aircraft) : 956
 Packing instruction (LQ) : Y956
 Packing group : III
 Labels : Miscellaneous

14.5 Environmental hazards

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ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

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

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : 1,2-dihydropyridazine-3,6-dione, potassium salt

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E2	ENVIRONMENTAL HAZARDS	Quantity 1 200 t	Quantity 2 500 t
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15.2 Chemical Safety Assessment

No information available.

SECTION 16: Other information**Full text of H-Statements**

H301 : Toxic if swallowed.
 H302 : Harmful if swallowed.
 H314 : Causes severe skin burns and eye damage.
 H315 : Causes skin irritation.
 H318 : Causes serious eye damage.
 H319 : Causes serious eye irritation.

Full text of other abbreviations

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Acute Tox. : Acute toxicity
Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation
Skin Corr. : Skin corrosion
Skin Irrit. : Skin irritation

(Q)SAR - (Quantitative) Structure Activity Relationship; ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; DIN - Standard of the German Institute for Standardisation; ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TRGS - Technical Rule for Hazardous Substances; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice

Further information

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.

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Emergency Phone Number

<u>Europe:</u>	All European Countries	+44 (0) 1235 239 670 (NCEC)
<u>Asia Pacific:</u>	East / South East Asia – Regional Number	+65 3158 1074
	Australia	+61 2801 44558
	New Zealand	+64 9929 1483
	China	+86 532 8388 9090
	China Taiwan	+86 10 5100 3039
	Japan	+81 345 789 341
	Indonesia	00780 3011 0293
	Malaysia	+60 3 6207 4347
	Thailand	001800 1 2066 6751
	Korea	+65 3158 1285 +82 (0)234 798 401
	Vietnam	+65 3158 1255
	India	+65 3158 1198 0800 100 7479
	Pakistan	+65 3158 1329
	Philippines	+65 31581203
	Sri Lanka	+65 3158 1195
	Emergency Phone Number	+65 3158 1200
<u>Middle East / Africa:</u>	Arabic speaking countries	+44 (0) 1235 239 671
	South Africa	+27 21 300 2732
	All other countries	+44 (0) 1235 239 670
<u>America</u>	United States of America and Canada	+1866 928 0789 +1 215 207 0061
<u>Latin America:</u>	Brazil	+55 11 3197 5891
	Mexico	+52 555 004 8763
	Chile	+56 225 829 336
	All other countries	+44 (0) 1235 239 670