

Dimilin Flo

Version 1.2 Revision Date: 17.03.2016 MSDS Number: 000060001229 Country: GB
Language: EN

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

Trade name : Dimilin Flo
Product code : 000060001229

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

Use of the Sub-stance/Mixture : Insecticide, Acaricide
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)**

Acute aquatic toxicity, Category 1 H400: Very toxic to aquatic life.

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Chronic aquatic toxicity, Category 1

H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms : 

Signal word : Warning

Hazard statements : H410 Very 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.

Additional Labelling:

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

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Insecticide

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
N-[[4-chlorophenyl)amino]carbonyl]-2,6-difluorobenzamide	35367-38-5 252-529-3	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 30 - < 50

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1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400	< 0.05
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For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- If inhaled : Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.
If symptoms persist, call a physician.
- In case of skin contact : Wash off with soap and plenty of water.
- In case of eye contact : 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.
If symptoms persist, call a physician.
Do not give milk or alcoholic beverages.

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.

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 : Wear full protective clothing and self-contained breathing ap-

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for firefighters paratus.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
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 : Ensure adequate ventilation.
Evacuate personnel to safe areas.
Material can create slippery conditions.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
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 : For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of work-day.

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. Containers which are opened must be carefully re-sealed and kept upright to prevent leakage.

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

7.3 Specific end use(s)

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Specific use(s) : Insecticide

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

Contains no substances with occupational exposure limit values.

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 : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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

Appearance : suspension, liquid

Colour : off-white

Odour : Do not attempt to smell the product as it is hazardous.

Odour Threshold : No data available

pH : 6 - 10

Freezing point : No data available

Boiling point/boiling range : 108 °C

Flash point : > 107 °C
Method: EEC A.9

Density : 1.190 g/cm³ (20 °C)

Solubility(ies)
Water solubility : dispersible

Auto-ignition temperature : No data available

Viscosity
Viscosity, dynamic : 154 mPa.s (20 °C)

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9.2 Other information

Surface tension : 51.5 mN/m
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 : Stable under recommended storage conditions.
No decomposition if used as directed.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials**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): > 5,000 mg/kg
GLP: yes

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.09 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Components:**1,2-benzisothiazol-3(2H)-one:**

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

Acute inhalation toxicity : LC50 (Rat): 0.5 mg/l

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Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Skin corrosion/irritation**Product:**

Species: Rabbit
Assessment: No skin irritation
GLP: yes

Remarks: Not classified due to lack of data.

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

Species: Rabbit
Assessment: No eye irritation

Remarks: Not classified due to lack of data.

Respiratory or skin sensitisation**Product:**

Species: Guinea pig
Assessment: Did not cause sensitisation on laboratory animals.
GLP: yes

Remarks: No data available

Test Type: LLNA
Species: Mouse
Assessment: Non sensitizing.
Method: OECD Test Guideline 429
GLP: yes

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.

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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.

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 : Remarks: No data is available on the product itself.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.0026 mg a.s./ L
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae : Remarks: No data is available on the product itself.

Components:**1,2-benzisothiazol-3(2H)-one:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1.6 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.94 mg/l
Exposure time: 48 h

Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 0.11 mg/l
Exposure time: 72 h

EC50 (Pseudokirchneriella subcapitata (algae)): 0.067 mg/l
Exposure time: 72 h

Toxicity to bacteria : EC20 (activated sludge): 3.3 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

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12.2 Persistence and degradability**Product:**

Biodegradability : Remarks: No data available

12.3 Bioaccumulative potential**Product:**

Bioaccumulation : Remarks: No data available

Components:**1,2-benzisothiazol-3(2H)-one:**

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 6.94

Partition coefficient: n-octanol/water : log Pow: 0.75

12.4 Mobility in soil**Product:**

Mobility : Remarks: No data available

Remarks: No data available

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

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.
Very toxic to aquatic life with long lasting effects.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic organisms.

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

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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 3082
 ADR : UN 3082
 RID : UN 3082
 IMDG : UN 3082
 IATA : UN 3082

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 (Diflubenzuron)
 ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 (Diflubenzuron)
 RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 (Diflubenzuron)
 IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 (Diflubenzuron)
 IATA : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., Environmentally hazardous substance, liquid, n.o.s.
 (Diflubenzuron)

14.3 Transport hazard class(es)

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

14.4 Packing group

ADN

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Packing group : III
 Classification Code : M6
 Hazard Identification Number : 90
 Labels : 9

ADR

Packing group : III
 Classification Code : M6
 Hazard Identification Number : 90
 Labels : 9
 Tunnel restriction code : (E)

RID

Packing group : III
 Classification Code : M6
 Hazard Identification Number : 90
 Labels : 9

IMDG

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

IATA

Packing instruction (cargo aircraft) : 964
 Packing instruction (passenger aircraft) : 964
 Packing instruction (LQ) : Y964
 Packing group : III
 Labels : Miscellaneous

14.5 Environmental hazards

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 : Not applicable

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of dangerous chemicals

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.

E1	ENVIRONMENTAL HAZARDS	Quantity 1 100 t	Quantity 2 200 t
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15.2 Chemical Safety Assessment

No information available.

SECTION 16: Other information

Full text of H-Statements

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.
 H410 : Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity
 Aquatic Acute : Acute aquatic toxicity
 Aquatic Chronic : Chronic aquatic toxicity
 Eye Dam. : Serious eye damage
 Skin Irrit. : Skin irritation
 Skin Sens. : Skin sensitisation

(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

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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.

GB / EN

Carechem24 International Worldwide Coverage

Emergency Phone Number

<u>Europe:</u>	All European Countries	+44 (0) 1235 239 670 (NCEC)
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	New Zealand	+64 9929 1483
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	China Taiwan	+86 10 5100 3039
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	Indonesia	00780 3011 0293
	Malaysia	+60 3 6207 4347
	Thailand	001800 1 2066 6751
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	South Africa	+27 21 300 2732
	All other countries	+44 (0) 1235 239 670
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	Mexico	+52 555 004 8763
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