

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

1.1. Product identifier

Product form : Mixture
Trade name : Shirlan
Product code : IKF-1216
Type of product : SC (Suspension Concentrate)

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Fungicide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Belchim Crop Protection NV/SA
Technologielaan 7
1840 Londerzeel - Belgium
T +32 (0)52 30 09 06 - F +32 (0)52 30 11 35
info@belchim.com - www.belchim.com

1.4. Emergency telephone number

Emergency number : +32(0)14584545
24 H/7 days

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] Mixtures/Substances: SDS EU 2015: According to Regulation (EU) 2015/830 (REACH Annex II)

Skin sensitisation, Category 1 H317
Reproductive toxicity, Category 2 H361d
Hazardous to the aquatic environment — Acute Hazard, Category 1 H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Suspected of damaging fertility or the unborn child. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

GHS08

GHS09

Signal word (CLP) :

Warning

Hazardous ingredients :

Fluazinam

Hazard statements (CLP) :

H317 - May cause an allergic skin reaction.
H361d - Suspected of damaging the unborn child.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P101 - If medical advice is needed, have the product container or label at hand.
P102 - Keep out of reach of children.
P261 - Avoid breathing mist, vapours, spray.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves, protective clothing.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

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	P501 - Dispose of contents /container to a licensed hazardous-waste disposal contractor or collection site except for empty clean triple-rinsed containers which can be disposed of as non-hazardous waste.
EUH-statements	: EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.
Extra phrases	: Spe3: To protect aquatic organisms insects respect an unsprayed buffer zone of 5m to surface water bodies.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Fluazinam	(CAS-No.) 79622-59-6 (EC Index-No.) 612-287-00-5	38.4	Repr. 2, H361d Acute Tox. 4 (Inhalation), H332 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact	: May cause an allergic skin reaction.
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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	: Water spray. Dry powder. Foam. Carbon dioxide.
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5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.
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6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

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 : Ensure good ventilation of the work station.

Personal protective equipment : Gloves. Protective clothing. Protective goggles.

Hand protection : Protective gloves

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : [In case of inadequate ventilation] wear respiratory protection.



Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : light yellow.

Odour : No data available

Odour threshold : No data available

pH : 6.56 (1 %)

Relative evaporation rate (butylacetate=1) : No data available

Melting point : Not applicable

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

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Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: > 1
Relative density	: 1.3
Density	: 1290 kg/m ³
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 0.062 Pa.s
Explosive properties	: None.
Oxidising properties	: None.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Shirlan	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 1.15 mg/l/4h

Fluazinam (79622-59-6)	
LD50 oral rat	> 4100 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 1.1 mg/l/4h

Skin corrosion/irritation	: Not classified pH: 6.56 (1 %)
Serious eye damage/irritation	: Not classified pH: 6.56 (1 %)
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

Shirlan	
Viscosity, kinematic	48.0620155 mm ² /s

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

Shirlan	
LC50 fish 1	0.061 mg/l
EC50 Daphnia 1	0.119 mg/l
EC50 72h algae (1)	0.534 mg/l
Fluazinam (79622-59-6)	
LC50 fish 1	0.036 mg/kg
EC50 Daphnia 1	0.19 mg/l
EC50 96h algae (1)	0.16 mg/l

12.2. Persistence and degradability

Shirlan	
Persistence and degradability	Contains non readily biodegradable component(s).

12.3. Bioaccumulative potential

Fluazinam (79622-59-6)	
BCF fish 1	1090
Log Kow	4.03

12.4. Mobility in soil

Fluazinam (79622-59-6)	
Log Koc	1958 l/kg

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

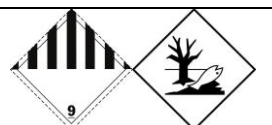
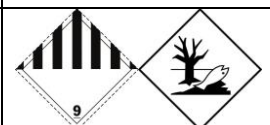
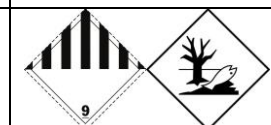
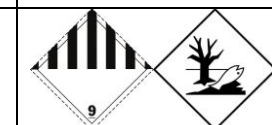
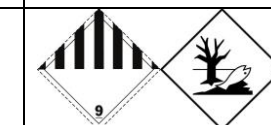
13.1. Waste treatment methods

Regional legislation (waste) : Waste instruction.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
3082	3082	3082	3082	3082
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fluazinam)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fluazinam), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s., 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
14.3. Transport hazard class(es)				
9	9	9	9	9
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the

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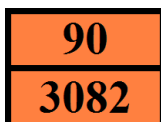
ADR	IMDG	IATA	ADN	RID
environment : Yes	environment : Yes Marine pollutant : Yes	environment : Yes	environment : Yes	environment : Yes
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Special provisions (ADR) : 274, 335, 375, 601

Orange plates :



- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

Classification code (ADN) : M6

Number of blue cones/lights (ADN) : 0

- Rail transport

No data 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

15.1.2. National regulations

National regulation

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Repr. 2	Reproductive toxicity, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Sens. 1	H317	Calculation method
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Repr. 2	H361d	Calculation method
Aquatic Acute 1	H400	On basis of test data
Aquatic Chronic 1	H410	Calculation method

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product