

SAFETY DATA SHEET (SDS)

TITLE: BIFENTHRIN 100 EC

1.0 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1.1 Product Identifier

Product Name : AG BIFENTHRIN 100EC
Common Name : Bifenthrin 100 g/l
CAS No. : 82657-04-3
EC No. : -

1.2 Relevant identified uses of the substance: Insecticide

1.3 Details of the Manufacturer / Supplier of the safety data sheet:

Supplier AGROMEC SARL
P.O.Box: 462
Jounieh, Lebanon
Tel +961 9 226874
E-mail agromec@agromec-international.com
Webpage www.agromec-international.com

1.4 Emergency Phone Number (24 hours)

+961 3 980599

2.0 HAZARDS IDENTIFICATION

2.1 Classification of the mixture:

2.2 Classification:



Acute Tox. 4 H302 Harmful if swallowed.

Signal Word Warning

Hazard Statements

H302 Harmful if swallowed.

Precautionary Statements

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P501 Dispose of contents/container in accordance with local/regional/national regulations.

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name / CAS No	% w/v	
Bifenthrin/ 82657-04-3	10	Acute Tox. 2, H300; Acute Tox. 3, H331; Carc. 2, H351; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1B, H317
Inert materials	to 100%	

4.0 FIRST AID MEASURES

4.1 Description of first aid measures

4.2 General information

Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control center or physician, or going for treatment.

4.3 In case of inhalation

Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.

4.4 In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

4.5 In case of eyes contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

4.6 In case of ingestion

If swallowed, seek medical advice immediately and show this container or label. DO NOT induce vomiting.

4.7 Note to physician

There is no specific antidote available. Treat symptomatically. Do not induce vomiting.

4.8 Most important symptoms and effects, both acute and delayed :

The product is a pyrethroid. Skin contact paresthesia effects (itching, tingling, burning or numbness) are transient, lasting up to 24 hours. Treat symptomatically. Do not induce vomiting.

5.0 FIRE – FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Extinguishing media - small fires: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide extinguisher. DO NOT use direct jet of water. Extinguishing media - large fires: Use alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : The product is not auto-flammable nor explosive (flash point > 100 °C) This product contains organic components that may burn and decompose during a fire producing dense black smoke containing hazardous products of combustion. Exposure to decomposition products may be a hazard to health.

5.3 Advice for fire-fighters

Move containers from fire area if possible. Fight fire from maximum distance. Stay away from storage tank ends. Contain fire control water for later disposal. Do not scatter material, extinguish only if flow can be stopped. Use flooding amounts of water as a fog, solid streams may be ineffective. Cool containers with flooding amounts of water as far a distance as possible. Use water spray to absorb toxic vapours. Avoid breathing toxic vapours. Keep upwind. Consider evacuation of downwind area if material is leaking.

5.4 Fire and Explosion Hazards:

Fire may produce irritating or poisonous vapours mists or other products of combustion. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

6.0 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.2 Personal precautions

Do not inhale fumes. Ventilate area of spill or leak, especially confined areas. Avoid contact with skin and eyes.

6.3 Environmental precautions

Do not discharge into drains or rivers. Do not allow to enter soil, waterways or waste water canal. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label. When the product contaminates public waters, inform appropriate authorities immediately in accordance with local regulations

6.4 Methods and material for containment and cleaning up

Keep all bystanders away. Wear full length clothing and gloves. Reposition any leaking containers so as to minimize further leakage. Dam and absorb spill with an absorbent material (e.g. sand or soil). Shovel the absorbed spill into drums. Disposal of the absorbed material will depend upon the extent of the spill. Contain in a secure location until disposal method is established. Decontaminate spill area with detergent and water and rinse with the smallest volume of water practicable.

6.5 Other information

N/A

6.6 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

6.7 Additional information

N/A

7.0 HANDLING AND STORAGE

7.1 Precautions for safe handling

7.2 Protective measures

Harmful by skin or eye contact, inhalation or ingestion. Avoid contact with eyes and skin, and inhalation of spray and vapour. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Operators should change and wash clothing daily. Remove clothing immediately if the insecticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination. Protect against physical damage. Do not contaminate lakes, streams, and ponds.

7.3 Advice on general occupational by hygiene

Avoid contact with eyes, skin or clothing. Do not breathe spray mist. When using, do not eat, drink, or smoke. Wash hands and exposed skin before meals and after work. Wash out container thoroughly and dispose of safely.

7.4 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions : Store in a closed, original container in a dry, cool covered warehouse in original, well-labelled containers. Keep containers tightly closed. Store away from food, feedstuffs, fertilisers, seed and agricultural chemicals. Keep away from children and animals. Keep away from heat & sources of ignition. Keep away from combustible material. Keep in an area equipped with sprinklers. No smoking. Local regulations should be complied with.

Further information on storage conditions : N/A

8.0 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

8.2 Occupational exposure limits: N/A

8.3 Additional exposure limits under the conditions of use: N/A

8.4 Exposure controls

8.5 Appropriate engineering controls

It is essential to provide adequate ventilation. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations. If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

8.6 Personal protection equipment

When opening the container and preparing spray wear: cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length nitrile rubber gloves, face shield or goggles. When using the prepared spray wear: cotton overalls buttoned to the neck and wrist, a washable hat and elbow-length gloves.

8.7 Eye / Face protection

The use of safety goggles is recommended. Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

8.8 Skin Protection

Employee must wear appropriate protective (impervious) clothing and equipment to prevent skin contact with the substance. Employee must wear appropriate synthetic protective gloves to prevent contact with this substance (Nitrile rubber).

8.9 Respiratory protection

Ensure good ventilation. For maximum protection, wear a supplied air, full-face piece respirator, airlined hood, or full-face piece self-contained breathing apparatus.

8.10 Other information

Follow all label instructions. Train employees in safe use of the product. Follow manufacturer's instructions for cleaning/maintaining personal protection equipment. Keep and wash personal protection equipment separately from other laundry.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Odor	:	characteristic
Flash point (°C)	:	N/A
pH value (1 % emulsion in water)	:	4.0 – 8.0
Density	:	1.00 g/ml
Oxidizing properties	:	N/A
Explosive properties	:	N/A
Auto-ignition temperature	:	N/A
Decomposition temperature	:	N/A

9.2 Other information: N/A

10.0 STABILITY AND RELIABILITY

10.1 Reactivity

No information available

10.2 Chemical stability

Stable under standard conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known

10.4 Conditions to avoid

Avoid extreme heat and exposure to light

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

The substance decomposes on burning, and producing toxic and corrosive fumes including toxic fumes.

10.7 Hazard Polymerization

Will not occur.

11.0 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects (data on active ingredient)

Acute toxicity

• Inhalation	: LC50 (rat) 0.82 mg/l of air over 4 hours
• Dermal	: LD50 (rabbit) > 2000 mg/kg
• Oral	: LD50 (rat) 550 mg/kg
Skin corrosion/Irritation	: Minimal irritant to the skin of rabbits
Eye damage/irritation	: Minimal irritant to the eyes of rabbits
Respiratory or skin sanitization	: N/A
Repeated exposure	: N/A

Other information

Germ cell mutagenicity	: N/A
Carcinogenicity	: N/A
Reproductive toxicity	: N/A
STOT- single exposure	: N/A
STOT- repeated exposure	: N/A
Aspiration hazard	: N/A

12.0 ECOLOGICAL INFORMATION

12.1 Toxicity (data on active ingredient)

12.1.1 Aquatic Toxicity

Toxicity to fish: LC50 - Cyprinus carpio (Carp) - 0,01 mg/l - 96,0 h.

12.1.2 Avian Toxicity

Bees: bifenthrin is highly toxic. No toxic effect of the formulation has been observed under field conditions.

Birds: No info.

12.1.3 Environmental Fate

Undergoes degradation in soil.

12.1.4 Persistence and degradability

N/A

13.0 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

See 13.2

13.2 Product / Packaging disposal

13.2.1 Product waste disposal

Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

13.2.2 Packing waste disposal

Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

14.0 TRANSPORT INFORMATION

14.1.1 Land transport (ADR/RID/GGVSE)

UN No	:	3352
Proper shipping name	:	Pyrethroid pesticide, liquid, toxic (bifenthrin)
Class(es)	:	6.1
Packing group	:	III
Hazard label(s)	:	6.1, marine pollutant

14.1.2 Sea transport (IMDG-Code/GGVSee)

UN-No	:	3352
Proper shipping name	:	Pyrethroid pesticide, liquid, toxic (bifenthrin)
Class(es)	:	6.1
Packing group	:	III
Hazard label(s)	:	6.1, marine pollutant

14.1.3 Air transport (ICAO-IATA/DGR)

UN No	:	3352
Proper shipping name	:	Pyrethroid pesticide, liquid, toxic (bifenthrin)
Class(es)	:	6.1
Packing group	:	III
Hazard label(s)	:	6.1, marine pollutant

15.0 REGULATORY INFORMATION

15.1.1 Risk and safety phrases in accordance with the Directive 2001/58/EC

Hazard Symbol	See section 2.
R-Risk Phrases	See section 2.

S- Safety Phrases

See section 2.

15.1.2 Hazard and Precautionary statements in accordance with the regulation 1272/2008/EC

Pictograms and Signal Word Code(s)

See section 2.

Hazard Statement Code (s)

See section 2.

16.0 OTHER INFORMATION

16.1.1 Pictograms and Signal Word Code(s) mentioned in section 3 in accordance with the regulation 1272/2008/EC

See section 2

16.1.2 Hazard statements mentioned in section 3 in accordance with the regulation 1272/2008/EC:

See section 2

16.2 Training advice: N/A

16.2.1 Disclaimer

The above information contained herein is given in good faith and to the best of our knowledge. However, no warranty is expressed or implied.

16.3 Further Information

The information contained herein relates only to the specified material identified. AGROMECC, believes that such information is accurate and reliable as of the data of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. AGROMECC urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.