

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

1.1. Product identifier

Trade name : Binder 10 EC
Product code : FI-016

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

1.2.1. Relevant identified uses

Use of the substance/preparation : Insecticide to be used by professionals for agriculture

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Rotam Agrochemical Company Limited
Unit 6, 26/F, Trend Centre, 29 Cheung Lee Street, Chai Wan, Hong Kong
T 00852 2896 0662 - F 00852 25586577
msds@rotam.com

1.4. Emergency telephone number

Emergency number : (86) 532 8388 9090

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flam. Liq. 3 H226
Acute Tox. 3 (Oral) H301
Acute Tox. 4 (Inhalation:dust,mist) H332
Aquatic Chronic 2 H411

Full text of H-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazard statements (CLP) :

H226 - Flammable liquid and vapour
H301 - Toxic if swallowed
H332 - Harmful if inhaled
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (CLP) :

P210 - Keep away from applicable ignition sources. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof equipment type equipment
P261 - Avoid breathing spray
P264 - Wash body thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P280 - Wear protection equipment
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor
P304+P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P321 - Specific treatment (see reference to supplemental first aid instruction on this label)
P330 - Rinse mouth
P370+P378 - In case of fire: Use appropriate media for extinction
P391 - Collect spillage

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P403+P235 - Store in a cool and well-ventilated place
P405 - Store locked up
P501 - Dispose of contents/container to local regulations

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	g/L	Classification according to Directive 67/548/EEC
Bifenthrin	(CAS No.) 82657-04-3	100	T; R25 Xn; R20 Xi; R43 N; R50/53

Name	Product identifier	g/L	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Bifenthrin	(CAS No.) 82657-04-3	100	Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of R-, H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician or poison control center immediately.
First-aid measures after inhalation : When symptoms occur: go into open air and ventilate suspected area.
First-aid measures after skin contact : When symptoms occur: rinse immediately with plenty of water.
First-aid measures after eye contact : Rinse eyes with plenty of water. Get medical attention immediately.
First-aid measures after ingestion : Rinse mouth and then drink plenty of water. DO NOT induce vomiting. Seek medical advice.

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

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Call a physician or poison control center immediately.

SECTION 5 : Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry powder, alcohol-resistant foam, carbon dioxide (CO₂).
Unsuitable extinguishing media : high volume water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (Nox).
Explosion hazard : Product is not explosive.
Reactivity : The product is stable at normal handling- and storage conditions.

5.3. Advice for firefighters

Precautionary measures fire : Wear self-contained breathing apparatus and protective suit (see item 8).
Firefighting instructions : Prevent runoff from entering drains, sewers or waterways.

SECTION 6 : Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear personal protective equipment.

6.1.2. For emergency responders

Protective equipment : Wear a self-contained breathing apparatus and appropriate personal protective equipment (PPE).

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6.2. Environmental precautions

Do not allow material to contaminate ground water system.

6.3. Methods and material for containment and cleaning up

For containment : Sweep or shovel spills into appropriate container for disposal.
Methods for cleaning up : Large spills : scoop solid spill into closing containers. Small quantities of liquid spill : take up in non-combustible absorbent material and shovel into container for disposal.

6.4. Reference to other sections

No additional information available

SECTION 7 : Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Wear proper protective equipment.
Precautions for safe handling : Do NOT get in eyes, on skin or on clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store tightly closed in a dry, cool and well-ventilated place.

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.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

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 : yellow.
Odour : Mild character odour
Odour threshold : No data available
pH : 4.91
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : 44.6 °C
Self ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : 0.918

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Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not explosive

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable at normal handling- and storage conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

All heat sources.

10.5. Incompatible materials

Strong acids, strong bases and oxidation agents.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Bifenthrin 100g/L EC (82657-04-3)	
LD50 oral rat	175 mg/kg
LD50 dermal rat	≥ 5000 mg/kg
LC50 inhalation rat (mg/l)	1.66 mg/l/4h

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Bifenthrin	
ErC50 (algae)	≥ 8 mg/l
TLM fish 1	0.00015 mg/l (rainbow trout)
TLM fish 2	0.00035 mg/l (bluegill sunfish)
TLM other aquatic organisms 1	0.00016 mg/l (Daphnia)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

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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

No additional information available

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No. : 3351

14.2. UN proper shipping name

Proper Shipping Name : PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C (Bifenthrin/Aromatic Hydrocarbon)
Transport document description : UN 3351 PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C(Bifenthrin/Aromatic Hydrocarbon), 6.1 (3), III, (D/E)

14.3. Transport hazard class(es)

Class (UN) : 6.1
Hazard labels (UN) : 6.1, 3



14.4. Packing group

Packing group (UN) : III

14.5. Environmental hazards

Dangerous for the environment :



Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 63
Classification code (UN) : TF2
Orange plates :



Special provision (ADR) : 61, 274
Transport category (ADR) : 2
Tunnel restriction code : D/E
Limited quantities (ADR) : 5L
Excepted quantities (ADR) : E1
EAC code : •3W
APP code : A(fl)

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

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

Not applicable

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SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases::

Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) 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
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Flam. Liq. 3	Flammable liquids Category 3
Skin Sens. 1	Skin sensitisation Category 1
H226	Flammable liquid and vapour
H301	Toxic if swallowed
H317	May cause an allergic skin reaction
H332	Harmful if inhaled
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
R20	Harmful by inhalation.
R25	Toxic if swallowed.
R43	May cause sensitisation by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
N	Dangerous for the environment
T	Toxic
Xi	Irritant
Xn	Harmful

SDS EU (REACH Annex II)

Disclaimer: The information provided by Rotam Agrochemical Co., Ltd contained herein is given in good faith and correct to the best of our knowledge. However, the information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.