

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date 01-Mar-2022

Revision Number 1

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

### 1.1. Product identifier

**Product Name** PLUTO  
**Product Code(s)** TP.3019.I.1\_\_\_ISR  
**Chemical name** Bifenazate 240 SC  
**Pure substance/mixture** Mixture

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

**Recommended use** Insecticide; For professional users only  
**Uses advised against** No information available

### 1.3. Details of the supplier of the safety data sheet

#### Manufacturer

Tapazol Chemical Works Ltd.  
1st HaSolela st.  
West. Ind. Zone  
Beit Shemesh, Israel 9905415  
Tel: +972-2-992-6040  
Fax: +972-2-9926050  
For further information, please contact [sds@tapazol.co.il](mailto:sds@tapazol.co.il)

### 1.4. Emergency telephone number

**Emergency Telephone** +972 4 777 1900  
National Institute for Information on Poisoning  
Rambam Health Care Campus, Haifa, Israel

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

<b>Specific target organ toxicity (repeated exposure)</b>	Category 2 - (H373)
<b>Chronic aquatic toxicity</b>	Category 2 - (H411)

### 2.2. Label elements

Contains Bifenazate (ISO)



**Signal word**

Warning

**Hazard statements**

H373 - May cause damage to organs through prolonged or repeated exposure

H411 - Toxic to aquatic life with long lasting effects Contains Bifenazate (ISO). May produce an allergic reaction.

EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

**Precautionary Statements - EU (§28, 1272/2008)**

P102 - Keep out of reach of children

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P314 - Get medical advice/attention if you feel unwell

P501 - Dispose of contents/ container to an approved waste disposal plant

**Additional information**

SP1 - Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

**2.3. Other hazards****SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable

**3.2 Mixtures**

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Bifenazate (ISO)	442-820-5	149877-41-8	<25	Skin Sens. 1 (H317) STOT RE 2 (H373) Aquatic Acute 1 (H400) M=1 Aquatic Chronic 1 (H410) M=1

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

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

**SECTION 4: First aid measures****4.1. Description of first aid measures**

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.

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

Symptoms Itching. Rashes. Hives.

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

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Small Fire** Dry chemical, CO2, water spray or regular foam.  
**Large Fire** Water spray, fog or regular foam  
 Dike fire-control water for later disposal  
 Move containers from fire area if you can do it without risk

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

**5.2. Special hazards arising from the substance or mixture**

**Specific hazards arising from the chemical** Product is or contains a sensitizer. May cause sensitization by skin contact.

**5.3. Advice for firefighters**

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

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

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

**6.2. Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

**6.3. Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**6.4. Reference to other sections**

**Reference to other sections** See section 8 for more information. See section 13 for more information.

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

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

**7.3. Specific end use(s)**

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure Limits****Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

**8.2. Exposure controls****Personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

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

**Physical state** Liquid  
**Color** Off- white to brown

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6.5 - 7.5	
pH (as aqueous solution)		
Melting point / freezing point		
Boiling point / boiling range	>100 °C	
Flash point	>100 °C	
Evaporation rate	No data available.	
Flammability (solid, gas)	No data available.	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available.	
Lower flammability or explosive limits	No data available.	
Vapor pressure	No data available.	
Vapor density	No data available.	
Relative density	1.02 - 1.16	
Water solubility	Forms a suspension	
Solubility(ies)	No data available.	
Partition coefficient	No data available.	
Autoignition temperature	No data available.	
Decomposition temperature		
Kinematic viscosity	849 - 1132 mm <sup>2</sup> /s	
Dynamic viscosity	No data available.	

## 9.2. Other information

## **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

### 10.2. Chemical stability

Stability Stable under normal conditions.

#### Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

### 10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

### 10.5. Incompatible materials

Incompatible materials None known based on information supplied.

### 10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

## **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Oral LD50 5000 mg/kg. Based on available data, the classification criteria are not met.  
 Dermal LD50 > 2000 mg/kg. Based on available data, the classification criteria are not met.  
 Inhalation LC50 > 5.726 mg/l air 4 h Based on available data, the classification criteria are not met.

**Skin corrosion/irritation** Non-irritating to the skin. Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Non-irritating to the eyes. Based on available data, the classification criteria are not met.

**Respiratory or skin sensitization** Not a skin sensitizer. Based on available data, the classification criteria are not met.

#### Germ cell mutagenicity

Chemical name	European Union
Bifenazate (ISO)	Not classified

#### Carcinogenicity

Chemical name	European Union
Bifenazate (ISO)	Not classified

#### Reproductive toxicity

Chemical name	European Union
Bifenazate (ISO)	Not classified

**STOT - single exposure** Not classified. (Based on calculation method classification criteria are not met).

**STOT - repeated exposure** Cat 2 (H373) - May cause damage to organs through prolonged or repeated exposure. [Bifenazate (ISO)].

**Aspiration hazard** Not classified. (Based on available data, the classification criteria are not met).

## SECTION 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity** H411 - Toxic to aquatic life with long lasting effects. Classification based on calculation method.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Bifenazate (ISO)	Acute toxicity: EC50 = 0.3 mg/l; Chronic toxicity: NOEC = NA	Acute toxicity: LC50 = 0.58 mg/l; Chronic toxicity: NOEC = 0.017 mg/l	-	Acute toxicity: EC50 = 0.058 mg/l; Chronic toxicity: NOEC = 0.15 mg/l

### 12.2. Persistence and degradability

**Persistence and degradability** Non-persistent [Bifenazate].

### 12.3. Bioaccumulative potential

**Bioconcentration factor (BCF)** 83 L/Kg [Bifenazate]

Chemical name	Partition coefficient
Bifenazate (ISO)	Log P = 3.4 (pH 7, 20 °C)

### 12.4. Mobility in soil

**Mobility in soil** Slightly mobile (linear) [Bifenazate].

**12.5. Results of PBT and vPvB assessment**

**PBT and vPvB assessment**                      The components in formulation do not meet the criteria for classification as PBT or vPvB.

**12.6. Other adverse effects****SECTION 13: Disposal considerations****13.1. Waste treatment methods**

**Waste from residues/unused products**                      Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging**                      Do not reuse empty containers.

**SECTION 14: Transport information****IMDG**

14.1 UN number                      3082  
 14.2 UN proper shipping name                      Environmentally hazardous substance, liquid, n.o.s. [Bifenazate]  
 14.3 Transport hazard class(es)                      9  
 14.4 Packing group                      III  
 14.5 Marine pollutant                      Yes  
     Environmental hazards                      Yes  
 14.6 Special precautions for user                      None  
     Special Provisions  
 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

**RID**

14.1 UN number                      3082  
 14.2 UN proper shipping name                      Environmentally hazardous substance, liquid, n.o.s. [Bifenazate]  
 14.3 Transport hazard class(es)                      9  
 14.4 Packing group                      III  
 14.5 Environmental hazards                      Yes  
 14.6 Special precautions for user                      None  
     Special Provisions

**ADR**

14.1 UN number                      3082  
 14.2 UN proper shipping name                      Environmentally hazardous substance, liquid, n.o.s. [Bifenazate]  
 14.3 Transport hazard class(es)                      9  
 14.4 Packing group                      III  
 14.5 Environmental hazards                      Yes  
 14.6 Special precautions for user                      None  
     Special Provisions

**IATA**

14.1 UN number                      3082  
 14.2 UN proper shipping name                      Environmentally hazardous substance, liquid, n.o.s. [Bifenazate]  
 14.3 Transport hazard class(es)                      9  
 14.4 Packing group                      III  
 14.5 Environmental hazards                      Yes  
 14.6 Special precautions for user                      None  
     Special Provisions

## SECTION 15: Regulatory information

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

#### National regulations

##### France

Occupational Illnesses (R-463-3, France)

##### Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

#### European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

#### Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

#### Persistent Organic Pollutants

Not applicable

#### Dangerous substance category per Seveso Directive (2012/18/EU)

E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

#### International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDSL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AICS	Contact supplier for inventory compliance status

#### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

### 15.2. Chemical safety assessment

## SECTION 16: Other information

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Full text of H-Statements referred to under section 3

H317 - May cause an allergic skin reaction

H373 - May cause damage to organs through prolonged or repeated exposure

H400 - Very toxic to aquatic life



H410 - Very toxic to aquatic life with long lasting effects

**Legend**

SVHC: Substances of Very High Concern for Authorization:

**Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Classification procedure**

H373 - Classification based on calculation method

H411 - Classification based on calculation method

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGl(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

**Revision date**

01-Mar-2022

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**Disclaimer**

**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.**

**End of Safety Data Sheet**