

# 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 25-Jul-2022

Revision Number 1

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

### 1.1. Product identifier

**Product Name** DISCOVERY  
**Product Code(s)** TP.2006.F.1\_\_\_ISR  
**Chemical name** Boscalid 177 Trifloxystrobin 100 SC  
**Pure substance/mixture** Mixture

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

**Recommended use** Fungicide; 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>Effects on or via lactation</b>	Yes - (H362)
<b>Acute aquatic toxicity</b>	Category 1 - (H400)
<b>Chronic aquatic toxicity</b>	Category 1 - (H410)

### 2.2. Label elements

Contains Trifloxystrobin (ISO)

**Signal word**

Warning

**Hazard statements**

H362 - May cause harm to breast-fed children

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

EUH208 - Contains ( Trifloxystrobin ). May produce an allergic reaction

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

P102 - Keep out of reach of children

P201 - Obtain special instructions before use

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

P263 - Avoid contact during pregnancy and while nursing

P273 - Avoid release to the environment

P391 - Collect spillage

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]
Boscalid	606-143-0	188425-85-6	14-19	Aquatic Chronic 2 (H411)
Trifloxystrobin (ISO)	604-237-6	141517-21-7	7-12	Lact. H362 Skin Sens. 1 (H317) Aquatic Acute 1 (H400) M=100 Aquatic Chronic 1 (H410) M=10

**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**

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<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**  
**Large Fire**

Dry chemical, CO<sub>2</sub>, water spray or regular foam.  
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.

**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**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Take up mechanically, placing in appropriate containers for disposal.
<b>Prevention of secondary hazards</b>	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. Remove contaminated clothing and shoes.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. 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**

Chemical name	Latvia	Luxembourg	Romania	Slovakia
Trifloxystrobin (ISO) 141517-21-7	-	-	5 mg/g Creatinine - urine (Fluorine) - end of shift	-

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

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

**Hand protection** Wear suitable gloves.

<b>Skin and body protection</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>General hygiene considerations</b>	Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Color</b>	Off- white

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	6 - 8	
<b>pH (as aqueous solution)</b>		
<b>Melting point / freezing point</b>		
<b>Boiling point / boiling range</b>		
<b>Flash point</b>	>100 °C	
<b>Evaporation rate</b>	No data available.	
<b>Flammability (solid, gas)</b>	No data available.	
<b>Flammability Limit in Air</b>		
<b>Upper flammability or explosive limits</b>	No data available.	
<b>Lower flammability or explosive limits</b>	No data available.	
<b>Vapor pressure</b>	No data available.	
<b>Vapor density</b>	No data available.	
<b>Relative density</b>	1.0 - 1.2	
<b>Water solubility</b>	Forms a suspension	
<b>Solubility(ies)</b>	No data available.	
<b>Partition coefficient</b>	No data available.	
<b>Autoignition temperature</b>	No data available.	
<b>Decomposition temperature</b>		
<b>Kinematic viscosity</b>	No data available.	
<b>Dynamic viscosity</b>	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** > 5.606 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
Boscalid	Not classified
Trifloxystrobin (ISO)	Not classified

### Carcinogenicity

Chemical name	European Union
Boscalid	Not classified
Trifloxystrobin (ISO)	Not classified

**Reproductive toxicity** Classification based on data available for ingredients. May cause harm to breast-fed children.

Chemical name	European Union
Boscalid	Not classified
Trifloxystrobin (ISO)	Lact. (H362)

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

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

**Aspiration hazard** Not classified. (Based on calculation method classification criteria are not met).

## **SECTION 12: Ecological information**

### 12.1. Toxicity

**Ecotoxicity** Non-toxic to honeybees.  
 H400 - Very toxic to aquatic life.  
 Classification based on calculation method.

H410 - Very toxic to aquatic life with long lasting effects.  
Classification based on calculation method.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Boscalid	Acute toxicity: EC50 = 3.75 mg/l; Chronic toxicity: NOEC = NA	Acute toxicity: LC50 = 2.7 mg/l; Chronic toxicity: NOEC = 0.125 mg/l	-	Acute toxicity: EC50 = 5.33 mg/l; Chronic toxicity: NOEC = 1.3 mg/l
Trifloxystrobin (ISO)	Acute toxicity: ErC50 = 0.0174 mg/l; Chronic toxicity: NOEC = 0.0025 mg/l	Acute toxicity: LC50 = 0.015 mg/l; Chronic toxicity: NOEC = 0.0043 mg/l	-	Acute toxicity: LC50 = 0/00862 mg/l; Chronic toxicity: NOEC = 0.00276 mg/l

### 12.2. Persistence and degradability

**Persistence and degradability** Trifloxystrobin is not rapidly degradable.  
Boscalid is not readily biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulation** Trifloxystrobin is not bioaccumulative.  
Boscalid: moderate level of bioaccumulation.

**Bioconcentration factor (BCF)** Trifloxystrobin: BCF < 500 L/kg;  
Boscalid: BCF = 107 L/Kg

### Component Information

Chemical name	Partition coefficient
Boscalid	Log P = 2.96 (at pH 7, 20 °C)
Trifloxystrobin (ISO)	log Pow of 4.5 (Method OECD TG 107 at 25 °C)

### 12.4. Mobility in soil

**Mobility in soil** Trifloxystrobin: DT50 = 2.1-6.1 days (12°C).  
Boscalid: DT50 = 245 - 1000 (20°C).

### 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. [Trifloxystrobin]  
**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	
Special Provisions	None
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. [Trifloxystrobin]
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	None

**ADR**

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

**IATA**

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

**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) Obviously hazardous to water (WGK 2)

**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  
 H362 - May cause harm to breast-fed children  
 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

#### **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**

H362 - Classification based on calculation method  
 H400 - Classification based on calculation method  
 H410 - 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** 25-Jul-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**