

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
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

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

Effects on or via lactation	Yes - (H362)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	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**

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
Ingestion	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, CO₂, 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

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. 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.

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	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

Physical state	Liquid
Color	Off- white

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6 - 8	
pH (as aqueous solution)		
Melting point / freezing point		
Boiling point / boiling range		
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	1.0 - 1.2	
Water solubility	Forms a suspension	
Solubility(ies)	No data available.	
Partition coefficient	No data available.	
Autoignition temperature	No data available.	
Decomposition temperature		
Kinematic viscosity	No data available.	
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 > 5.606 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 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

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

Disclaimer

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End of Safety Data Sheet