

SAFETY DATA SHEET

REGEV (STK 20)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1	IDENTIFICATION OF THE SUBSTANCE/PREPARATION	REGEV (STK 20) (Difenoconazole/TTO 200/400 EC)
	CHEMICAL NAME	Difenoconazole IUPAC: 3-chloro-4-[(2RS,4RS;2RS,4SR)-4-methyl-2-(1H-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-2-yl]phenyl 4-chlorophenyl ether CA: 1-[2-[2-chloro-4-(4-chlorophenoxy)phenyl]-4-methyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole Tea Tree Oil (<i>Melaleuca alternifolia</i>) (TTO)
1.2	USE OF PREPARATION	Fungicide
1.3	COMPANY/UNDERTAKING IDENTIFICATION	Stockton (Israel) Ltd 17 Ha'Mefalsim St. – P.O.Box 3517 Petach Tikva 4951447, ISRAEL
1.4	EMERGENCY TELEPHONE NUMBER	+972-72-2570000 (office hours)

2. HAZARDOUS IDENTIFICATION

Irritating to eyes. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.1 Classification of the mixture

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

- **Health hazards:** Eye Irrit 2- Category 2 – Warning; H319
- **Environmental hazards:** Aquatic Chronic I – Category I - Warning; H410

2.2 label elements

Labelling Regulation (EC) 1272/2008

- **Hazard pictograms:**



Pictograms-Codes: GHS07

GHS09

- **Signal words:** Warning
- **Hazard statements:** H319 - Causes serious eye irritation.
H410 - Very toxic to aquatic life with long lasting effects
- **Precautionary statements:**
 - **Prevention:** P262: Do not get in eyes, on skin, or on clothing
P273: Avoid release to the environment.
P280: Wear protective gloves and protective clothing
 - **Response:** P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - **Storage:** P102: Keep out of the reach of children

3. COMPOSITION/INFORMATION ON INGREDIENTS

Information on hazardous ingredients *

Common name	CAS No.	%	EC Number	Symbol	R-Phrases
Difenoconazole	119446-68-3	200	601-613-1	Xn, N	R22-50/53
Tea Tree Oil	68647-73-4	400	285-377-1	Xn, N	R10-R22-R36/38-R50

*For occupational exposure limits, see section 8.

4. FIRST AID MEASURES

Remove victim from area of exposure. Wash off remaining material with plenty of water.

EYE CONTACT	Wash out with water with the eyelid held wide open for at least 15 minutes. Get medical attention.
SKIN CONTACT	Remove contaminated clothing. Wash away remainder with water and soap
INHALATION	Remove victim to fresh air. If breathing is difficult: artificial respiration. Get medical attention.
INGESTION	Wash out mouth with plenty of water. Get medical attention. Never give anything by mouth to an unconscious person.

Note to physician: No special antidote. Treat symptomatically and supportively.

5. FIRE-FIGHTING MEASURES

Fire fighting media: Foam, dry powder, carbon dioxide or vaporising liquids. Do not use full water jet.

Fire & explosive hazards: Flash point: 63°C. Flash back may occur a long vapour trail.

Hazardous thermal (de)composition products: Carbon oxides, chloride and nitrogen compounds.

Protection of fire-fighters: Use breathing apparatus with independent air supply.

Additional information:

Cool containers at risk with water spray jet.

Fire residues and contaminated fire fighting water must be disposed of in accordance with the local regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear suitable protective clothing, protective gloves and tightly sealed goggles.

Environmental precautions: Prevent spills to reach any water course, surface and ground water. In case of leakage to water course inform the respective authorities.

Methods for cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes. Ventilation required. When handling, wear suitable protective clothing. Keep away from ignition sources -Do not smoke. Protect against electrostatic charges.

Storage: Keep only in the original container. Keep container tightly closed in a cool, dry, well ventilated place away from direct sunlight.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering measures: Ventilation required.

Hygiene measures: When handling do not eat, drink or smoke. Wash hands thoroughly after handling. Wash clothing separately before re-use.

Occupational Exposure Limits

Common name : Difenoconazole: not established

Common name : Tea Tree Oil (TTO) : Not established

Personal protective equipment

Respiratory system: Respiratory protection is not required if good ventilation is maintained.

Use approved half face respirator if using undiluted in confined spaces.

Skin and body: Wear suitable protective clothing.

Hands: Protective gloves. The glove material has to be impermeable and resistant to the product

Eyes: Safety goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid (Emulsifiable concentrate)
COLOUR	Amber
ODOUR	Characteristic odour
FLASH POINT	63°C (closed cup)
EXPLOSIVE PROPERTIES	Not explosive
OXIDIZING PROPERTIES	Not oxidizing
DENSITY	0.97 - 1 g/ml (20°C)
VAPOUR PRESSURE	Difenoconazole: 3.3×10^{-5} mPa (25°C) TTO: not determined. It is considered as volatile compound
WATER SOLUBILITY	Miscible
pH (1%)	5.8 at 20°C (5-8)

OCTANOL/WATER PARTITION COEFFICIENT		Difenoconazole: Kow log P = 4.4 (25°C) TTO: not relevant
10. STABILITY AND REACTIVITY		
Stability: Not subject to polymerization, stable under normal storage conditions.		
Materials to avoid: Oxidizing agents. Keep away from heat or flame.		
Hazardous reactions : None		
Hazardous decomposition products: Carbon oxides, chloride and nitrogen compounds.		
11. TOXICOLOGICAL INFORMATION		
11.1	Acute oral toxicity	LD ₅₀ , rats = 3,130 mg/kg b.w
11.2	Acute dermal toxicity	LD ₅₀ , rats > 5,000 mg/kg
11.3	Acute inhalation toxicity	LC ₅₀ , rats > 1.09 mg/L (4-h exposure) (maximum attainable concentration)
11.4	Skin irritation	Not irritant (rabbits)
11.5	Eye irritation	Mild irritant (rabbits)
11.6	Sensitization	Not sensitizer (guinea pig)
<u>Difenoconazole</u>		
Chronic toxicity : NOEL (rats) = 1 mg/kg/day (2 years) NOEL (mice) = 4.7 mg/kg/day (1.5 years)		
Carcinogenicity: EPA : Group C Carcinogen IARC: Not listed EU: Not listed		
Mutagenicity : Not mutagenic		
Reproduction toxicity : Not reproductive toxin		
Other information: Teratogenicity – Not teratogenic		
<u>Tea Tree oil (TTO)</u>		
Under normal use there are no carcinogenic, mutagenic, teratogenic and reproductive adverse effects expected.		
12. ECOLOGICAL INFORMATION		
<u>Formulation</u>		
Ecotoxicity -		
Fish (<i>poecilia reticulata</i>):	LC ₅₀ (96 hours) guppy fish = 2.85 mg/L	
Birds:	Acute oral LD ₅₀ Japanese quail > 2,000 mg/kg bw	
Bees (<i>Apis mellifera</i>):	Oral LD ₅₀ (48 hours) >100 µg a.i./bee	
<u>Difenoconazole</u>		
Ecotoxicity -		
Fish:	LC ₅₀ (96 hours) trout = 1.1 mg/L	
Daphnia magna:	LC ₅₀ (48 hours) = 0.77 mg/L	
Algae (<i>Scenedesmus subspicatus</i>)	EC ₅₀ (72 hours) = 0.03 mg/L	
Aquatic plant:	EC ₅₀ (14 days) Lemna gibba = 9.9 mg/L	
Birds:	Acute oral LD ₅₀ mallard duck > 2,150 mg/kg Acute oral LD ₅₀ Japanese quail > 2,000 mg/kg	
	Dietary LC ₅₀ (5 d) for bobwhite quail > 4,760 ppm Dietary LC ₅₀ (5 d) for mallard duck > 5,000 ppm	

Bees:	Oral LD ₅₀ (48 hours) >177 µg a.i./bee Contact LD ₅₀ (48 hours) > 100 µg a.i./bee
Environmental fate	
Mobility:	
Soil	
Immobile	
K _{oc} = 4545 mL/g	
Persistence/degradability	
Soil:	
medium persistent	
Lab half-life time (t _{1/2}): (median) 120 days	
Field half-life time (t _{1/2}): (median) 83 days	
Degradation is primarily via: microorganisms.	
Water:	
Stable at pH 5, 7, 9 (25°C, 30 days)	
DT ₅₀ whole system (water /sediment) = 8 months	
Bioaccumulative potential : Low	
Teat Tree Oil (TTO)	
Ecotoxicity	
Daphnia magna:	LC ₅₀ (48 hours) = 0.591 mg/L
Mobility / Persistence /degradability /bioaccumulative potential	
Due to its high volatility, Tea Tree Oil is not expected to be persistent, mobile or bioaccumulative in the environment. Readily biodegradable.	
13. DISPOSAL CONSIDERATION	
Product would be treated, stored, transported, and disposed of according to the local waste regulation authority. Do not flush to surface water or sanitary sewer system.	
14. TRANSPORT INFORMATION	
UN 3082, Environmentally Hazardous Substance , Liquid, N.O.S (Tea Tree Oil, Difenconazole) Class 9+marine pollutant , PG III	
15. REGULATORY INFORMATION	
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	Ensure all national/local regulations are observed.
15.2 Chemical Safety Assessment:	None
16. OTHER INFORMATION:	
The information contained in the Safety data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.	
Prepared by:	Registration Dept., Updated on: April 2021