

E-Scape ETQ Turf Fungicide

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Date of issue: 06/08/2015

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: E-Scape ETQ Turf Fungicide

Other means of identification: EPA Reg. No. 60063-50

1.2. Intended Use of the Product

Use of the substance/mixture: Fungicide

1.3. Name, Address, and Telephone of the Responsible Party

Manufacturer

Sipcam Agro USA, Inc.
2525 Meridian Parkway, Suite 350
Durham, NC 27713
T 919-226-1195

1.4. Emergency Telephone Number

Emergency Number : (800) 424-9300 CHEMTREC (transportation and spills) (800) 900-4044 Poison Control Center (human health) (800) 345-4735 ASPCA (animal health)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Acute Tox. 2 (Inhalation:dust,mist) H330
Carc. 2 H351
Repr. 2 H361
Aquatic Acute 1 H400

Full text of H-phrases: see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H330 - Fatal if inhaled.
H351 - Suspected of causing cancer.
H361 - Suspected of damaging fertility or the unborn child.
H400 - Very toxic to aquatic life.

Precautionary Statements (GHS-US)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe vapors, mist, or spray.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P284 - [In case of inadequate ventilation] wear respiratory protection .
P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P310 - Immediately call a poison center or doctor.
P320 - Specific treatment is urgent (see section 4 on this SDS).
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

No additional information available

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2.4. Unknown Acute Toxicity (GHS-US)

~12% of the mixture consists of ingredient(s) of unknown acute toxicity. of the mixture consists of ingredients of unknown acute toxicity.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Chlorothalonil	(CAS No) 1897-45-6	31.13	Acute Tox. 1 (Inhalation:dust,mist), H330 Eye Irrit. 2B, H320 Carc. 2, H351 Aquatic Acute 1, H400
2-tert-Butyl-4-(4-chlorophenyl)-1-(1,2,4-triazol-1-yl)-2-butanol	(CAS No) 80443-41-0	8.73	Acute Tox. 3 (Oral), H301
Morwet D-425 Powder		0.9	Comb. Dust Eye Irrit. 2A, H319
Silica, amorphous	(CAS No) 7631-86-9	0.4	Not classified
Octylphenol ethoxylate	(CAS No) 9036-19-5	0.4	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Siloxanes and Silicones, di-Me	(CAS No) 63148-62-9	0.22	Not classified
Octamethylcyclotetrasiloxane	(CAS No) 556-67-2	0.1	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Repr. 2, H361 Aquatic Chronic 4, H413

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes.

First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/Injuries: May be fatal if inhaled. May damage fertility or the unborn child.

Symptoms/Injuries After Inhalation: Fatal if inhaled.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: May be harmful if swallowed.

Chronic Symptoms: May cause cancer. May damage fertility. May damage the unborn child.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Alcohol foam, carbon dioxide, dry chemical, water spray, fog. Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

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Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Firefighting Instructions: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses. De-contaminate equipment or materials involved in pesticide fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Handle in accordance with good industrial hygiene and safety practice.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection. Use appropriate personal protection equipment (PPE).

Emergency Procedures: Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely.

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers.

Storage Area: Store locked up.

7.3. Specific End Use(s)

Fungicide

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Silica, amorphous (7631-86-9)		
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	6 mg/m ³
USA IDLH	US IDLH (mg/m ³)	3000 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	6 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	20 mppcf (80mg/m ³ /%SiO ₂)

8.2. Exposure Controls

Appropriate Engineering Controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal Protective Equipment

: Protective goggles. Gloves. High gas/vapor concentration: gas mask.



Hand Protection

: Wear chemically resistant protective gloves.

Eye Protection

: Chemical goggles or safety glasses.

Skin and Body Protection

: Use chemically protective clothing.

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Respiratory Protection : Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Other Information : When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance : Very light beige

Odor : Mild

Odor Threshold : No data available

pH : 5.61

Evaporation Rate : No data available

Melting Point : No data available

Freezing Point : No data available

Boiling Point : 100 °C (212 °F)

Flash Point : Not flammable

Auto-ignition Temperature : No data available

Decomposition Temperature : No data available

Flammability (solid, gas) : No data available

Vapor Pressure : No data available

Relative Vapor Density at 20 °C : No data available

Relative Density : No data available

Specific Gravity : 1.19

Specific gravity / density : 9.93 lb/gal

Solubility : Water: Not soluble. Disperses

Partition Coefficient: N-Octanol/Water : No data available

Viscosity : No data available

9.2. Other Information

VOC content : 56 %

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Product is stable.
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures.
- 10.5. Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.
- 10.6. Hazardous Decomposition Products:** Carbon oxides (CO, CO₂). sulfur oxides. Silicon oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Inhalation:dust,mist: Fatal if inhaled.

E-Scape ETQ Turf Fungicide	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5050 mg/kg
LC50 Inhalation Rat	> 2.23 mg/l/4h
ATE (Dust/Mist)	0.16 mg/l/4h
Chlorothalonil (1897-45-6)	
LD50 Oral Rat	3500 - 4800 mg/kg
LD50 Dermal Rat	2020 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	2.52 - 13 mg/l/4h
ATE (Vapors)	2.52 mg/l/4h
ATE (Dust/Mist)	0.05 mg/l/4h

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2-tert-Butyl-4-(4-chlorophenyl)-1-(1,2,4-triazol-1-yl)-2-butanol (80443-41-0)	
ATE (Oral)	100.00 mg/kg body weight
Morwet D-425 Powder	
LD50 Oral Rat	> 5000 mg/kg
Octylphenol ethoxylate (9036-19-5)	
LD50 Oral Rat	1700 mg/kg
ATE (Oral)	1,700.00 mg/kg body weight
Octamethylcyclotetrasiloxane (556-67-2)	
LD50 Oral Rat	1540 mg/kg
LD50 Dermal Rat	1770 mg/kg
LD50 Dermal Rabbit	794 µl/kg
LC50 Inhalation Rat	36 g/m ³ (Exposure time: 4 h)
ATE (Dermal)	1,770.00 mg/kg body weight
ATE (Vapors)	36.00 mg/l/4h
ATE (Dust/Mist)	36.00 mg/l/4h
Silica, amorphous (7631-86-9)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	> 2.2 mg/l (Exposure time: 1 h)
Siloxanes and Silicones, di-Me (63148-62-9)	
LD50 Oral Rat	> 24 g/kg

Skin Corrosion/Irritation: Not classified.

pH: 5.61

Serious Eye Damage/Irritation: Not classified.

pH: 5.61

Respiratory or Skin Sensitization: Not classified.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Suspected of causing cancer.

Chlorothalonil (1897-45-6)	
IARC group	2B
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Silica, amorphous (7631-86-9)	
IARC group	3

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Fatal if inhaled.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: May be harmful if swallowed.

Chronic Symptoms: May cause cancer. May damage fertility. May damage the unborn child.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Chlorothalonil (1897-45-6)	
LC50 Fish 1	0.012 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
EC50 Daphnia 1	0.0342 - 0.143 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	0.0076 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
Morwet D-425 Powder	
LC50 Fish 1	10 (10 - 100) mg/l Zebra fish
EC50 Daphnia 1	> 100 mg/l

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Octylphenol ethoxylate (9036-19-5)	
LC50 Fish 1	7.2 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	8.6 mg/l (Exposure time: 48 h - Species: Daphnia magna [static])
ErC50 (algae)	0.21 mg/l (Exposure time: 96 h - Species: Selenastrum Green Algae)
Octamethylcyclotetrasiloxane (556-67-2)	
LC50 Fish 1	> 500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
LC 50 Fish 2	> 1000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
NOEC chronic fish	0.0044 mg/l
Silica, amorphous (7631-86-9)	
LC50 Fish 1	5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 Daphnia 1	7600 mg/l (Exposure time: 48 h - Species: Ceriodaphnia dubia)

12.2. Persistence and Degradability

E-Scape ETQ Turf Fungicide	
Persistence and Degradability	Not established.
Siloxanes and Silicones, di-Me (63148-62-9)	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

E-Scape ETQ Turf Fungicide	
Bioaccumulative Potential	Not established.
Chlorothalonil (1897-45-6)	
Log Pow	2.9 (at 22 °C)
Octamethylcyclotetrasiloxane (556-67-2)	
BCF fish 1	12400
Log Pow	5.1
Silica, amorphous (7631-86-9)	
BCF fish 1	(no bioaccumulation expected)
Siloxanes and Silicones, di-Me (63148-62-9)	
Bioaccumulative Potential	Not established.

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Contains Chlorothalonil, Tebuconazole)

Hazard Class : 9

Identification Number : UN3082

Label Codes : 9

Packing Group : III

Marine Pollutant : Marine pollutant

ERG Number : 171



Non-Bulk-Not Regulated (DOT defined as container capacities less than or equal to 119 gallons)

14.2. In Accordance with IMDG

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains Chlorothalonil, Tebuconazole)

Hazard Class : 9

Identification Number : UN3082

Packing Group : III

Label Codes : 9



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EmS-No. (Fire) : F-A

EmS-No. (Spillage) : S-F

14.3. In Accordance with IATA

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains Chlorothalonil, Tebuconazole)

Packing Group : III

Identification Number : UN3082

Hazard Class : 9

Label Codes : 9

ERG Code (IATA) : 9L



SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

E-Scape ETQ Turf Fungicide	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
EPA FIFRA Pesticide Product Notice	This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.
EPA FIFRA Signal Word	Caution
EPA FIFRA Hazard Statements	Harmful if inhaled.
EPA FIFRA Precautionary Statements	Remove and wash contaminated clothing before reuse. Avoid breathing spray mist.
Chlorothalonil (1897-45-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	0.1 %
Octylphenol ethoxylate (9036-19-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Octamethylcyclotetrasiloxane (556-67-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
Silica, amorphous (7631-86-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Siloxanes and Silicones, di-Me (63148-62-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2 US State Regulations

Chlorothalonil (1897-45-6)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.
Chlorothalonil (1897-45-6)	
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List	
Silica, amorphous (7631-86-9)	
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List	

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U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 06/08/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 1 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 1
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Carc. 2	Carcinogenicity Category 2
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Flam. Liq. 3	Flammable liquids Category 3
Repr. 2	Reproductive toxicity Category 2
H226	Flammable liquid and vapor
	May form combustible dust concentrations in air
H301	Toxic if swallowed
H302	Harmful if swallowed
H312	Harmful in contact with skin
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H330	Fatal if inhaled
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H400	Very toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)