

SECTION 1: Product and Company Identification

1.1. Product identifier

Trade name : Myclotect
 Product code : EPA Reg. No. 42750-166-74779

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

1.2.1. Relevant identified uses

Use of the substance/preparation : Fungicide

1.2.2. Uses advised against

No data available

1.3. Details of the supplier of the safety data sheet

Rainbow Ecoscience
 11571 K-Tel Drive
 Minnetonka, MN 55343
 Phone: 1-(877) 272-6747 (toll free)
www.rainbowecoscience.com

1.4. Emergency telephone number

Emergency number : (800)-424-9300 (CHEMTREC)

FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Serious eye damage/eye irritation : Category 2A
 Reproductive toxicity : Category 2
 Aspiration hazard : Category 1

Hazards not otherwise classified (HNOC)

Not applicable

2.2. Label elements

GHS Labeling Elements

Hazard pictograms (CLP) :



Signal word : DANGER

Hazard statements :
 : H319 - Causes serious eye irritation
 : H361 - Suspected of damaging fertility or the unborn child
 : M304 - May be fatal if swallowed and enters airways

GHS Labeling Elements

- Precautionary statements (prevention) : P201 – Obtain special instructions before use
P202 – Do not handle until all safety precautions have been read and understood
P280 – Wear protective gloves/clothing and eye protection/face protection
P264 – Wash face, hands and any exposed skin thoroughly after handling
- Precautionary statements (response) : P308+P313 – IF exposed or concerned: Get medical advice/attention.
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 – If eye irritation persists: Get medical advice or attention
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor
P331 - Do NOT induce vomiting
- Precautionary Statements (Storage) : P405 - Store locked up
- Precautionary statements (disposal) : P501 – Dispose of contents/container in accordance with federal, state and local regulations.
- Other Information : May be harmful if swallowed. May be harmful in contact with skin. Very toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

Substance

Not applicable

Mixture

Name	CAS Number	Weight %	Active Ingredient
Solvent Naphtha (Petroleum), Heavy Aromatic	64742-94-5	24.24 – 25.75	
Myclobutanil	88671-89-0	19.11 – 20.29	
Cyclohexanone	108-94-1	9.5 – 10.5	X
Propylene Glycol	57-55-6	5.7 – 6.3	
Other Ingredients	Proprietary	>40.0	

The exact percentage (concentration) of composition has been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	: Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
IF INHALED	: Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur.
IF IN EYES	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists
IF ON SKIN OR CLOTHING	: Wash skin with soap and water.
IF SWALLOWED	: ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention
Self-Protection of the first aider	: Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.
Most important symptoms and effects, both acute and delayed	: Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and tearing of the eyes. Burning sensation.
Indication of any immediate medical attention and special treatment needed	: Note to physicians - Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large fire	: CAUTION: Use of water spray when fighting fire may be inefficient
Unsuitable extinguishing media	: Do not scatter spilled material with high pressure water streams

5.2. Special hazards arising from the substance or mixture

No information available

5.3. Advice for firefighters

Firefighting instructions	: Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Ensure adequate ventilation. Use personal protective equipment as required.
Avoid contact with skin, eyes or clothing.

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 : Pick up and transfer to properly labeled containers.

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. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store away from other materials.

SECTION 8: Exposure controls/personal protection

8.1. Personal protective equipment

Eye/Face Protection: If splashes are likely to occur, wear safety glasses with side-shields.

Hand protection: Wear chemical-resistant gloves (Category C such as barrier laminate; butyl rubber ≥ 14 mils; nitrile rubber ≥ 14 mils; or neoprene rubber ≥ 14 mils).

Skin and body Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, and shoes

Respiratory Protection: No protective equipment is needed under normal use conditions due to the method of application. 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. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

8.2. Exposure controls

Exposure limits: The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Cyclohexane 108-94-1	STEL: 50 ppm TWA: 20 PPM S*	TWA: 50 ppm TWA: 200 mg/m ³ (vacated) TWA 25 ppm	IDLH: 700 ppm TWA: 25 ppm TWA: 100 mg/m ³

		(vacated) TWA 100 mg/m ³ (vacated) S*	
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Biological occupational exposure limits

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

Appropriate engineering controls

- Showers
- Eyewash stations
- Ventilation systems

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: white
Odor	: Oli paint-like
Odor threshold	: No data available
pH	: 5.5 – 6.5
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: >95 °C / 200 °F
Flammability Limit (UEL)	: No data available
Flammability Limit (LEL)	: No data available
Vapor pressure	: 0.213 mPa @ 24°C (myclobutanil)
Relative vapor density at 20 °C	: No data available
Specific Gravity	: No data available
Liquid Density	: 0.99 – 1.03 g/ml (8.22 – 8.6 lb/gal)*
Solubility in Water	: No data available
Partition coefficient	: Log Pow = 2.94 (pH 7-8, 25° C) (myclobutanil)
Kinematic viscosity	: 528.8 mPa/s (20° C); 491.3 mPa/s (40° C)

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing

10.4. Conditions to avoid

None known based on information supplied.

10.5. Incompatible materials

None known based on information supplied

10.6. Hazardous decomposition products

None known based on information supplied

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available. Aspiration into lungs can produce sever lung damage. May cause pulmonary edema can be fatal. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. May cause irritation. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Repeated exposure may cause skin dryness or cracking. Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation. May be harmful in contact with skin.
Ingestions	Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Difficulty in breathing. Coughing and/or wheezing. Dizziness. May cause redness and tearing of the eyes.
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Information on toxicological effects

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	4,109.40 mg/kg
ATEmix (dermal)	3,838.30 mg/kg
ATEmix (inhalation-dust/mist)	6.21 mg/l

Oral LD50	>3,500 mg/kg
Dermal LD50	>2,000 mg/kg
Inhalation LC50	unknown

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Solvent Naphtha (Petroleum), Heavy Aromatic 64742-94-5	>5000 mg/kg (Rat)	>2mL/kg (Rabbit)	>590 mg/m3 (Rat) 4h
Myclobutanil 88671-89-0	= 1600 mg/kg (Rat)	= 7500 mg/kg (Rabbit)	-
Cyclohexanone 108-94-1	= 1544 mg/kg (Rat)	= 947 mg/kg (Rabbit)	>6.2 mg/L (Rat) 4h

Propylene Glycol 57-55-6	= 20 g/kg (Rat)	= 20800 mg/kg (Rabbit)	-
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	May cause skin irritation
Serious eye damage/eye irritation	Classification based on data available for ingredients. Causes serious eye irritation.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Cyclohexanone 108-94-1	-	Group 3	-	-

Legend

IARC (International Agency for Research on Cancer)

Group 3 – Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity	Contains a known or suspected reproductive toxin. Classification is based on data available for ingredients. Suspected of damaging fertility or the unborn child.
STOT – single exposure	No information available
STOT – repeated exposure	No information available
Target organ effects	Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system
Aspiration hazard	May be fatal if swallowed and enters airways
Other adverse effects	No information available
Interactive effects	No information available

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological Summary

Very toxic to aquatic life with long lasting effects.

Ecotoxicity data

Ecotoxicity data are not available for Myclotect. Active ingredient data are given below:

Chemical name	Algae/aquatic plants	Fish	Crustacea
Solvent Naphtha (Petroleum), Heavy Aromatic 64742-94-5	EC50: =2.5mg/L (72h, Skeletonema costatum)	LC50: =19mg/L (96h, Pimephales promelas) LC50: =2.34mg/L (96h, Oncorhynchus mykiss) LC50: =1740mg/L (96h, Lepomis macrochirus) LC50: =45mg/L (96h, Pimephales promelas) LC50: =41mg/L (96h, Pimephales promelas)	

Cyclohexanone 108-94-1	-	LC50: 481 – 578mg/L (96h, Pimephales promelas) LC50: =8.9mg/L (96h, Pimephales promelas)	-
Propylene Glycol 57-55-6	EC50: =19000mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =51600mg/L (96h, Oncorhynchus mykiss) LC50: 41 – 47mL/L (96h, Oncorhynchus mykiss) LC50: =51400mg/L (96h, Pimephales promelas) LC50: =710mg/L (96h, Pimephales promelas)	EC50: >1000mg/L (48h, Daphnia magna) EC50: >10000mg/L (24h, Daphnia magna)

12.2. Persistence and degradability

No information available.

Component Information

Chemical name	Partition coefficient
Solvent Naphtha (Petroleum), Heavy Aromatic 64742-94-5	6.1
Cyclohexanone 108-94-1	0.86

Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Pesticide Disposal: Applicators must dispose of any unused product as the label indicates. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, if allowed by state and local authorities Stay out of smoke from burning container.

SECTION 14: Transport information

DOT: Not Regulated

Packing group: PG III

SECTION 15: Regulatory information

FIFRA Information:

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Signal word : **CAUTION**
Hazard statements : Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin.
Precautionary statements : Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

International Inventories

TSCA Does not comply
DSL/NDSL Does not comply
EINECS/ELINCS Does not comply
ENCS Does not comply
IECSC Does not comply
KECL Does not comply
PICCS Does not comply
AIIC Does not comply

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 Chemical and Chemical Substances
AIIC – Australian Inventory of Industrial Chemicals

US Federal Regulations

SARA Title III Status

311/312 Hazard Categories: Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

313 Toxic Chemicals: Section 313 of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 – Threshold Values %
Myclobutanil – 88671-89-0	1.0

CWA (Clean Water Act): This product does not contain any substance regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA: This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Cyclohexanone 108-94-1	5000 lb	-

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Myclobutanil – 88671-89-0	Developmental Male Reproductive

US State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X
Myclobutanil 88671-89-0	X	-	-
Cyclohexanone 108-94-1	X	-	X
Propylene Glycol 57-55-6	X	-	X

SECTION 16: Other information

NFPA Hazard Rating	HEALTH	2
	FLAMMABILITY	0
	INSTABILITY	0
	4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal	

HMIS Hazard Rating	HEALTH	2*
	FLAMABILITY	0
	PHYSICAL HAZARDS	0
	PERSONAL PROTECTION	X

*Chronic Health Hazard

SDS US

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