

Section 1. Identification of the substance/preparation and of the company

Product Name: **ZEALOUS**

Synonyms: None

Product Use: FUNGICIDE for TURF & ORNAMENTALS

Name of Supplier: GROPRO CORPORATION

Manufacturer Information:

- 1) Head office: GROPRO CORPORATION
12600 West Frontage Road
Brunsville, Mn 55337
- 2) Factory: Address: 427-1, Gisan-ri, Seongsan-myeon, Goryeong-gun,
Gyeongsanbuk-do, South Korea. 717-812

Section 2. Hazards identification

- > **Explosion:** No cauterization
- > **Eye effects:** Irritating to eyes
- > **Skin effects:** Moderately irritating to the skin
- > **Inhalation:** Moderately irritating to the lungs
- > **Ingestion:** Harmful if swallowed
- > **Carcinogenic effects:** No known significant effects or critical hazards
- > **Mutagenic effects:** No known significant effects or critical hazards
- > **Teratogenicity/Reproductive toxicity:** No known significant effects or critical hazards
- > **Effects of overexposure:** Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage. Repeated or prolonged with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to the substance can produce targeted organ damage.
- > **Chemical listed as carcinogens or potential carcinogens:** N/A
- > **Environment effects:** No hazard

Section 3. Composition/information on ingredients

Chemical / Component Name	Concentration	CAS Number	EC Number	R Phrases
Geraniol (geranium oil plant extract)	16.7%	106-24-1	-	None
Isopropyl alcohol	30.00%	67-63-0	-	None
Water	53.3%	7732-18-5	-	None
TOTAL	100.00%			

Section 4. First aid

- > **Inhalation:** Remove from exposure site to fresh air and keep at rest. Obtain medical advice.
- > **Skin Contact:** Wash thoroughly with soap and water, flush with plenty of water. Take off soiled clothes. Contact physician if symptoms persist.
- > **Eye Contact:** Rinse thoroughly with plenty of water for 10 minutes at least. Remove contacts if present. Contact a physician if symptoms persist.
- > **Ingestion:** Do not induce vomiting. Wash the mouth with water; loosen tight clothing, such as a collar, tie, belt, or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Section 5. Fire-fighting measures

- > **Suitable extinguishing media:** Water, water spray, foam carbon dioxide, dry powder
- > **Extinguishing agents to avoid:** None
- > **Special fire fighting precautions:** Wear respiratory protection to avoid dust and smoke

Section 6. Accidental release measures

- > In case of spill or leakage, soak up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc.
- > Dispose of with chemical waste

Section 7. Handling and storage

- > **Handling:** Avoid contact with skin and eyes
- > **Storage:** Keep in dry, cool place (0-35°C)

Section 8. Exposure controls/personal protection

- > **National occupational exposure limits:** None
- > **Toxic material:** None
- > **Engineering measures:** No special ventilation requirements. Good general ventilation should be sufficient to control airborne levels. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- > **Eyes:** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Safety glasses with side-shields are recommended.
- > **Skin:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

- > **Respiratory:** Use a properly fitted, air-purifying or air-fed respirator that complies with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product, and the safe working limits of the selected respirator.
- > **Hands:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Nitrile rubber gloves are recommended.
- > **Hygiene measures:** Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory, and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9. Physical and chemical properties

- > **Physical State:** Liquid
- > **Appearance Color:** None
- > **Odor:** A little
- > **Partition coefficient:** Solubility-water freely soluble
- > **pH:** 6~7
- > **Specific Gravity:** 0.95~1.05
- > **Melting point (°C):** Melting point/freezing point: 0°C
- > **Initial boiling point and boiling range:** 100~105°C - lit.
- > **Flash point (°C):** Not applicable
- > **Auto-ignition temp. (°C):** Not applicable
- > **Vapor pressure (mm Hg):** 1 hPa at 70.6°C

Section 10. Stability and reactivity

- > **Stability:** Stable
- > **Conditions to avoid:** Open flames or other high temperature sources, which might induce thermal decomposition
- > **Hazardous decomposition products:** Not expected
- > **Hazardous polymerization:** Will not occur

Section 11. Toxicological information

Acute toxicity

- > **Oral (rat):** LD50 \geq 5,000mg/kg
- > **Dermal (rat):** LD50 \geq 4,000mg/kg
- > **Inhalation (mouse):** LD50 \geq 5,000mg/kg
- > **Skin Irritation (rabbit):** Unknown
- > **Eye Irritation (rabbit):** Unknown
- > **Long term toxicity:** Unknown
- > **Chronic toxicity:** Non-carcinogenic, non-teratogenic, non-mutagenic or reproductive.
- > Not harmful to laboratory animals

Section 12. Ecological information

- > Friendly to ecosystem
- > Does not leach to water way

Section 13. Disposal considerations

Wastes from residues/unused products:

- > Dispose of in accordance with local state and federal regulations
- > Do not contaminate water, food or feed by storage or disposal

Section 14. Transport information

Shipping name: GROPRO - ZEALOUS

Not classified as dangerous in the means of transport regulations

Section 15. Regulatory information

No.

Section 16. Other information

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