

Material Safety Data Sheet



Transportation and Medical Emergency Phone: 1-800-535-5053 (INFOTRAC)
General Phone: 317-580-8282

EPA Reg. Number: 67690-20
Creation Date: 08/01/2002
Revision Date: 01/04/2006

Topflor* Ornamental Plant Growth Regulator

SePRO Corporation Carmel, IN 46032

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: Topflor* Ornamental Plant Growth Regulator

COMPANY IDENTIFICATION:

SePRO Corporation
11550 North Meridian Street, Suite 600
Carmel, IN 46032
www.sepro.com
Information Phone: 317-580-8282 (Monday - Friday, 8:00 am to 5:00 pm EST)

2. HAZARDOUS IDENTIFICATIONS

EMERGENCY OVERVIEW

Blue liquid with a faint alcohol/slight grape odor.

- May cause eye irritation and/or corneal injury.
- May cause skin irritation.

EMERGENCY PHONE NUMBER: 800-535-5053

3. COMPOSITION / INFORMATION ON INGREDIENTS

Flurprimidol:	CAS# 056425-91-3	0.38%
alpha-(1-Methylethyl)- alpha-[4-(trifluoromethoxy) phenyl]-5-pyrimidinemethanol		
Inert Ingredients, Totaling		99.62%
Solvent	CAS# Proprietary	2-10%

4. FIRST AID MEASURES

EYES: Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call poison control center or doctor, preferably an ophthalmologist, for treatment advice.

SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison control center or doctor for treatment advice. Wash clothing before reuse. Destroy contaminated articles including leather items such as shoes.

INGESTION: Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

INHALATION: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. If breathing is difficult, qualified personnel should administer oxygen.

NOTE TO PHYSICIAN: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

FLASH POINT: 180°F
METHOD USED: CC

FLAMMABLE LIMITS:
LFL: Not applicable
UFL: Not applicable

EXTINGUISHING MEDIA: Product is a water-based suspension and will not burn. If product is involved in a fire and the water evaporates, use a water fog, CO₂, dry chemical or foam as extinguishing methods.

FIRE AND EXPLOSION HAZARDS: This product will not burn until a sufficient amount of water has evaporated. At this point, the product will exhibit the flammability characteristics of the organic portion of this formulation. Keep unnecessary people away; isolate the hazard area and deny unnecessary entry. Highly toxic fumes are released in fire situations.

FIREFIGHTING EQUIPMENT: Wear positive-pressure, self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS AND LEAKS: Absorb small spills with a non-reactive material such as clay or sand. Place waste in a suitable container for disposal. Report large spills to CHEMTREC and consult SePRO Corporation for assistance. Prevent runoff.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep out of reach of children. Harmful if swallowed, absorbed through the skin, or inhaled. Avoid breathing spray mist or contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Wash exposed clothing before reuse. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Avoid freezing.

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8. EXPOSURE CONTROL/PERSONAL PROTECTION

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

EXPOSURE GUIDELINES:

Flurprimidol: SePRO's Industrial Hygiene Guide is 5 mg/M³.

ENGINEERING CONTROLS: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use a NIOSH approved air-purifying respirator.

SKIN PROTECTION: When prolonged or frequently repeated contact could occur, use chemically protective clothing resistant to this material. Selection of specific items such as faceshield, gloves, boots, apron, or full-body suit will depend on operation.

EYE/FACE PROTECTION: Use chemical goggles.

APPLICATORS AND ALL OTHER HANDLERS: Refer to the product label for personal protective clothing and equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT DENSITY: 8.45 lbs/gallon @ 25°C

SPECIFIC GRAVITY: 1.014 @ 25°C

APPEARANCE: Blue liquid

ODOR: Faint alcohol/slight grape odor

pH: (1% in water): 8.0

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal storage conditions.

INCOMPATIBILITY: (Specific materials to avoid.) Avoid freezing.

HAZARDOUS DECOMPOSITION PRODUCTS: If water evaporates, residues may produce harmful vapors under fire conditions.

HAZARDOUS POLYMERIZATION: Not known to occur.

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS: This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

EYES: May cause moderate eye irritation with corneal injury, which may be slow to heal.

SKIN: Prolonged or repeated contact may cause skin irritation, but is unlikely to result in absorption of harmful amounts. However, repeated skin exposure to large quantities may result in absorption of harmful amounts. The dermal LD₅₀ has not been determined. For the active ingredient, the LD₅₀ for skin absorption in rabbits is >5000 mg/kg.

INGESTION: Low toxicity if ingested. Small amounts ingested incidental to normal handling operations are not likely to cause injury; however, ingesting larger amounts may cause injury. May cause central nervous system effects. Single dose oral LD₅₀ has not been determined. For the active ingredient, the oral LD₅₀ for male rats is 900 mg/kg and for female rats is 700 mg/kg.

INHALATION: Excessive exposure may cause irritation to upper respiratory tract (nose and throat). May cause central nervous system effects. For the active ingredient, the LC₅₀ for rats is >5 mg/L for 4 hours.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Based on the available data, repeated exposures to small amounts are not anticipated to cause significant adverse effects.

CANCER INFORMATION: Flurprimidol did not cause cancer in laboratory animals.

TERATOLOGY (BIRTH DEFECTS): Contains components which did not cause birth defects; however, in laboratory animals, other toxic effects to the fetus have been seen.

REPRODUCTIVE EFFECTS: In laboratory animal studies on Flurprimidol, effects on reproduction were seen only at doses that produced significant toxicity to the parent animals.

MUTAGENICITY: For Flurprimidol, animal mutagenicity studies were negative.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Do not apply directly to water bodies (lakes, rivers, streams) or wetlands. Do not apply when weather conditions favor runoff or drift from the target area. Do not contaminate water by cleaning of equipment or disposal of wastes.

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13. DISPOSAL CONSIDERATIONS

DISPOSAL: Do not contaminate water, food, or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site per label use directions or at an approved waste disposal facility. Follow all local, state, and federal requirements for disposal.

14. TRANSPORT INFORMATION

Department of Transportation (DOT)	Not Regulated
International Air Transport Association (IATA)	Not Regulated
International Maritime Organization (IMO)	Not Regulated

If you have further questions contact your SePRO Corporation representative.

15. REGULATORY INFORMATION

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

U.S. REGULATIONS

SARA TITLE III, SECTION 313: This product contains the following substance subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

Proprietary Solvent

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An Immediate Health Hazard
A delayed Health Hazard

STATE RIGHT-TO-KNOW: The following product is cited on the hazardous substance list(s) in the states indicated below.

Chemical Name	CAS Number
Solvent	Proprietary

- Massachusetts
- Pennsylvania
- Rhode Island
- New Jersey

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Category	Rating
Health	2
Flammability	1
Reactivity	0

16. OTHER INFORMATION, USES AND RESTRICTIONS

MSDS STATUS: Revised 01/06/2006

The Information Herein Is Given In Good Faith, But No Warranty, Express or Implied, Is Made. Consult SePRO Corporation for Further Information.

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