

MATERIAL SAFETY DATA SHEET



Emergency Phone: 800-535-5053
SePRO Corporation
Carmel, IN 46032-4562

CUTLESS* 50W TURF GROWTH REGULATOR

Effective Date: 03/01/02
EPA Registration Number: 67690-15

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Cutless* 50W Turf Growth Regulator

COMPANY IDENTIFICATION:

SePRO Corporation
11550 North Meridian Street, Suite 600
Carmel, IN 46032-4562

2. COMPOSITION/INFORMATION ON INGREDIENTS:

Flurprimidol:	CAS #056425-91-3	50%
alpha-(1-Methylethyl)- alpha-(4-trifluoromethoxy) phenyl)-5-pyrimidinemethanol		
Other Ingredients, total, including:		50%
Kaolin, Clay	CAS # 001332 -58-7	
Proprietary Surfactants		

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

3. HAZARDOUS IDENTIFICATIONS:

EMERGENCY OVERVIEW

Hazardous Chemical. Off-white to buff powder. Slight aromatic odor. May cause moderate eye irritation with corneal injury. Prolonged or repeated exposure may cause slight skin irritation. LD₅₀ for skin absorption in rabbits is >5000 mg/kg. Oral LD₅₀ for rats is 1250 mg/kg. The LC₅₀ for rats is 4.84 mg/L for 4 hours.

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

EYE: May cause moderate eye irritation with corneal injury.

SKIN: Prolonged or repeated exposure may cause slight skin irritation. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The LD₅₀ for skin absorption in rabbits is >5000 mg/kg. Did not cause allergic skin reactions when tested in guinea pigs.

INGESTION: Low toxicity if swallowed. The oral LD₅₀ for rats is 1250 mg/kg. Small amounts swallowed incidental to normal operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

INHALATION: Vapors are unlikely due to physical properties. Dust may cause irritation to upper respiratory tract. The LC₅₀ for rats is >4.84 mg/L.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: In animals, has been shown to cause effects on the liver, ovaries, and adrenals. Repeated excessive exposure to crystalline silica may cause silicosis, a progressive and disabling disease of the lungs. Some evidence suggests that kidney effects may result from excessive exposures also.

CANCER INFORMATION: Flurprimidol did not cause cancer in laboratory animals. This mixture contains crystalline, which is listed by IARC and NTP as a carcinogen for hazard communication purposes under OSHA Standard 29 CFR 1910.1200.

TERATOLOGY (BIRTH DEFECTS): Contains component(s), which did not cause birth defects. Other fetal effects occurred only at doses toxic to the mother.

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

4. FIRST AID:

EYES: Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.

SKIN: Wash skin with plenty of water.

INGESTION: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

INHALATION: Move person to fresh air; if effects occur, consult a physician.

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: Not applicable
METHOD USED: Not applicable

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FLAMMABLE LIMITS

LFL: 0.13 oz/cu ft.
UFL: Not applicable

AUTO-IGNITION TEMPERATURE: 392°F, (200°C) with decomposition.

EXTINGUISHING MEDIA: Use water, CO₂ or dry chemicals.

FIRE AND EXPLOSION HAZARDS: Will emit toxic vapors as it burns.

FIRE-FIGHTING EQUIPMENT: Wear full protective clothing and use self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES:

ACTION TO TAKE FOR SPILLS AND LEAKS: Contain and sweep up material of small spills and dispose as waste. Report large spills to INFOTRAC or 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 or inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Store in original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

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

Flurprimidol: SePRO Industrial Hygiene Guideline is 5 mg/M³.

Silica, crystalline: ACGIH TLV and OSHA PEL are 0.05 mg/M³ for quartz, tripoli, and fused silica; 0.05 mg/M³ (respirable) for cristobalite and tridymite.

Silica, amorphous (diatomaceous earth, uncalcined): ACGIH TLV is 10 mg/M³, inhalable particulate, 3 mg/M³, respirable particulate. OSHA PEL is 5 mg/M³.

PELs are in accord with those recommended by OSHA, as in the 1989 revision of PELs.

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. In dusty atmospheres, use a NIOSH approved dust respirator.

SKIN PROTECTION: Use gloves impervious to this material when prolonged or frequently repeated contact could occur.

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:

BOILING POINT: Not applicable

VAPOR PRESSURE: Not applicable

VAPOR DENSITY: Not applicable

SOLUBILITY IN WATER: Disperses in water

SPECIFIC GRAVITY: Not applicable

APPEARANCE: Off-white to buff powder

ODOR: Slight aromatic odor

pH: (aqueous 50/50) 5.2

10. STABILITY AND REACTIVITY:

STABILITY: (CONDITIONS TO AVOID) Stable under normal storage conditions.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) None known

HAZARDOUS DECOMPOSITION PRODUCTS: Will emit toxic vapors as it burns.

HAZARDOUS POLYMERIZATION: Does not occur.

11. TOXICOLOGICAL INFORMATION:

MUTAGENICITY: For crystalline silica, in-vitro mutagenicity studies were negative in some cases and positive in other cases. For flurprimidol, animal mutagenicity studies were negative.

12. ECOLOGICAL INFORMATION:

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ENVIRONMENTAL DATA: Do not apply directly to water 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.

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHOD: Wastes are toxic. Improper disposal of excess waste, 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.

14. TRANSPORT INFORMATION:

For DOT regulatory information, if required, consult transportation regulations, product shipping papers, or 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 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment 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

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

<u>Chemical Name</u>	<u>CAS Number</u>	<u>List</u>
KAOLIN	001332 -58-7	PA1

PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).

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:

Health	2
Flammability	2
Reactivity	0

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND): To the best of our knowledge, this product contains no chemical subject to reporting under CERCLA.

16. OTHER INFORMATION:

MSDS STATUS: New 03/01/02

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