

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

Effective Date: 10/20/01 EPA Reg. Number: 67690-4

SONAR* A.S. Herbicide

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Sonar* A.S. Herbicide

COMPANY IDENTIFICATION:

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

2. COMPOSITION/INFORMATION ON INGREDIENTS:

Fluridone: 1-Methyl-3-phenyl- CAS # 059756-60-4 41.7% 5-(3-(Trifluoro-methyl)phenyl)-

4(1H)-Pyridinone

Inert Ingredients, Total, Including 58.3%

Propylene Glycol CAS # 000057-55-6

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

Light tan to gray opaque liquid with a slight odor. May cause eye and skin irritation. LD₅₀ for skin absorption in rabbits is >2000 mg/kg. Oral LD₅₀ for rats is >500 mg/kg. **EMERGENCY PHONE NUMBER: 800-535-5053**

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 slight (temporary) eye irritation. Corneal injury is unlikely.

SKIN: Prolonged exposure may cause slight skin irritation. A single prolonged exposure is not likely to result in the material being absorbed through the skin in harmful amounts. The LD₅₀ for skin absorption in rabbits is >2000 mg/kg. Fluridone did not cause allergic skin reactions when tested in guinea pigs.

INGESTION: Single dose oral toxicity is low. The oral LD₅₀ for rats is >500 mg/kg. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

INHALATION: At room temperature, vapors are minimal due to physical properties; a single exposure is not likely to be hazardous.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:

Fluridone, in animals, has been shown to cause liver and kidney effects.

CANCER INFORMATION: Fluridone did not cause cancer in laboratory animal studies.

TERATOLOGY (BIRTH DEFECTS): Fluridone did not cause birth defects; other fetal effects occurred only at doses toxic to the mother.

REPRODUCTIVE EFFECTS: Fluridone did not interfere with reproduction in animal studies.

4. FIRST AID:

EYE: Hold eyes 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 eyes. Call a poison control center or doctor 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.

INGESTION: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the 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 ambulance, then give artificial respiration, preferably by mouth to mouth. Call a poison control center or doctor for further treatment advice.

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NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES:

FLASH POINT: 200°F (93.3°C)

METHOD USED: SCC

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: Use absorbent material to contain and clean up small spills and dispose as waste. 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions. **EXPOSURE GUIDELINES:** Propylene Glycol: AIHA WEEL is 50 ppm total, 10 mg/M³ aerosol only.

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 guidelines. If respiratory irritation is experienced, use a NIOSH approved air-purifying respirator.

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

EYE/FACE PROTECTION: Use safety glasses.

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

9. PHYSICAL AND CHEMICAL PROPERTIES:

BOILING POINT: (@ 1 atmosphere) 212°F (100°C)

SOLUBILITY IN WATER: Disperses in water

VAPOR PRESSURE: Approximately 2.3 mmHg @ 25°C

SPECIFIC GRAVITY: 1.15 @ 25°C

APPEARANCE: Light tan to gray opaque liquid

ODOR: Slight

pH: (aqueous 50/50) 8.45

10. STABILITY AND REACTIVITY:

STABILITY: Stable under normal storage conditions.

INCOMPATIBILITY: (Specific materials to avoid) Avoid frequing

freezing.

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

HAZARDOUS POLYMERIZATION: Not known to occur.



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11. TOXICOLOGICAL INFORMATION:

MUTAGENICITY: For fluridone, in-vitro mutagenicity studies were predominantly negative and animal mutagenicity studies were negative.

12. ECOLOGICAL INFORMATION:

Follow label use directions carefully so as to avoid adverse effects on non-target organisms. In order to avoid impact on threatened or endangered aquatic plant or animal species, users must consult their state fish and game agency or the U.S. Fire and wildlife Service before making applications. Do not contaminate water when disposing of equipment wash waters. Trees and shrubs growing in water treated with Sonar A.S. may occasionally develop chlorosis. Do not apply in tidewater or brackish waters. Low rates should be used in shallow areas where the water depth is considerably less than the average depth of the entire treatment site, for example shallow shoreline areas.

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:

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 TITLE III, SECTION 313: 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 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

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA

701): (4=Extreme; 3=High; 2=Moderate; 0=Insignificant)

Health 1 Flammability 0 Reactivity: 0

STATE RIGHT-TO-KNOW: The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in Section 1 of the MSDS.

Chemical Name	CAS Number	List
Propylene Glycol (1,2-Propanediol)	000057-55-6	PA1

PA1=Pennsylvania Hazardous Substance (present at >/= to 1.0%).

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

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



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16. OTHER INFORMATION:

MSDS STATUS: Revised Sections: 3 & 8

Reference: DR-0336-1679 Replaces MSDS Dated: 7/1/98