

Material Safety Data Sheet



Transportation and Medical Emergency Phone: **1-800-535-5053**

General Phone: 317-580-8282

EPA Reg. Number: 67690-47

Revision Date: 01/15/09

Galleon* SC Aquatic Herbicide

SePRO Corporation Carmel, IN 46032-4565

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: Galleon* SC Aquatic Herbicide

COMPANY IDENTIFICATION:

SePRO Corporation

11550 North Meridian Street, Suite 600

Carmel, IN 46032-4565

www.sepro.com

Information Phone: 317-580-8282 (Mon – Fri, 8 am to 5 pm EST)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Tan liquid with a musty odor.

- CAUTION! Causes eye irritation

Emergency Phone Number: 1-800-535-5053

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

Potential Health Effects

Eye Contact: May cause slight temporary eye irritation. Corneal injury is unlikely.

Skin Contact: Prolonged contact is essentially non-irritating to skin.

Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Inhalation: No adverse effects are anticipated from single exposure to mist.

Ingestion: Harmful effects not anticipated from swallowing small amounts. Very low toxicity if swallowed.

Effects of Repeated Exposure: For the active ingredient(s), effects have been reported on the following organs: kidney and liver.

3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	AMOUNT
Penoxsulam	219714-96-2	21.7%
Propylene glycol	57-55-6	4.5%
Balance		73.8%

4. FIRST AID MEASURES

EYE CONTACT: 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 CONTACT: 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.

INHALATION: Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). 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. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor or going for treatment.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

FIRE FIGHTING PROCEDURES: Keep people away. Isolate fire and deny unnecessary entry. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the *Accidental Release Measures* and the *Ecological Information* sections of this MSDS.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

UNUSUAL FIRE AND EXPLOSION HAZARDS: This material will not burn until the water has evaporated. Residue can burn. If exposed to fire from another source and water is evaporated, exposure to high temperatures may cause toxic fumes.

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include and are not limited to: sulfur oxides, nitrogen oxides, hydrogen fluoride, fluorinated hydrocarbons, carbon monoxide, carbon dioxide.

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6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR

SPILLED: Contain spilled material if possible. **Small spills:**

Absorb with materials such as: clay, dirt, sand, Zorb-all®.

Collect in suitable and properly labeled containers. **Large spills:**

Contact **INFOTRAC** at 1-800-535-5053 for clean-up assistance.

PERSONAL PRECAUTIONS: Use appropriate safety equipment. For additional information, refer to Section 8, *Exposure Controls and Personal Protection*.

ENVIRONMENTAL PRECAUTIONS: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, *Ecological Information*.

7. HANDLING AND STORAGE

GENERAL HANDLING: Keep out of reach of children. Do not swallow. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling.

STORAGE: Store in a dry place. Store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:

• Propylene glycol: WEEL / TWA, Aerosol = 10 mg/m³

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

PERSONAL PROTECTION

Eye/Face Protection: Use safety glasses.

Skin Protection: No precautions other than clean body-covering clothing should be needed.

Hand Protection: Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guideline. In dusty or misty atmospheres, use an approved particulate respirator. The following should be an effective type of air-purifying respirator: organic vapor cartridge with a particulate pre-filter.

Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Controls: Ventilation: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

COLOR: Tan

ODOR: Musty

FLASHPOINT (CC): >100°C (>212°F) *Setflash Closed Cup ASTM D3828*

FLAMMABLE LIMITS IN AIR (lower/upper): No test data available

AUTOIGNITION TEMPERATURE: No test data available

VAPOR PRESSURE: No test data available

BOILING POINT (760 mmHG): No test data available

VAPOR DENSITY (Air = 1): No test data available

SPECIFIC GRAVITY (H₂O = 1): No test data available

LIQUID DENSITY: 1.11 g/cm³ *Calculated*; 1.104 g/cm³ *Calculated*

FREEZING POINT: No test data available

MELTING POINT: No test data available

SOLUBILITY IN WATER (by weight): No test data available

pH: 4.7 *Electrode*

DECOMPOSITION TEMPERATURE: No test data available

KINEMATIC VISCOSITY: No test data available

10. STABILITY AND REACTIVITY

STABILITY/INSTABILITY: Thermally stable at typical use temperatures.

Conditions to Avoid: Some components of this product can decompose at elevated temperatures.

Incompatible Materials: Avoid contact with oxidizing materials.

HAZARDOUS POLYMERIZATION: Will not occur.

THERMAL DECOMPOSITION: Decomposition products depend upon temperature, air supply and the presence of other materials. Gases are released during decomposition.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Ingestion: LD₅₀, Rat >5,000 mg/kg

Skin Absorption: LD₅₀, Rat >5,000 mg/kg

Inhalation: Maximum attainable concentration. LC₅₀, 4-hour, Aerosol, Rat >0.74 mg/L

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SENSITIZATION:

Skin: Did not cause allergic skin reactions when tested in guinea pigs.

REPEATED DOSE TOXICITY: For the active ingredient(s): In animals, effects have been reported on the following organs: kidney and liver.

CHRONIC TOXICITY AND CARCINOGENICITY: Active ingredient did not cause cancer in laboratory animals.

DEVELOPMENTAL TOXICITY: Active ingredient did not cause birth defects in laboratory animals.

REPRODUCTIVE TOXICITY: In animal studies, active ingredient did not interfere with reproduction.

GENETIC TOXICITY: In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

Indirect Photodegradation with OH Radicals:

Rate Constant	Atmospheric Half-life	Method
1.28E ⁻¹¹ cm ³ /s	10 hours	Estimated

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method
81%	28 days	OECD 301F Test
95.8%	64 days	OECD 306 Test

Biological Oxygen Demand (BOD):

BOD 5	BOD10	BOD20	BOD28
69%	70%	86%	

Chemical Oxygen Demand: 1.53 mg/mg

Theoretical Oxygen Demand: 1.68 mg/mg

ECOTOXICITY:

Data for Component: Penoxsulam

Material is very highly toxic to aquatic organisms on an acute basis (LC₅₀/EC₅₀ <0.1 mg/L in most sensitive species). Material is practically non-toxic to birds on an acute basis (LD₅₀ >2,000 mg/kg). Material is slightly toxic to birds on a dietary basis (LC₅₀ between 1,001 and 5,000 ppm).

Fish Acute & Prolonged Toxicity: LC₅₀, rainbow trout (*Oncorhynchus mykiss*), static, 96-hour is >100 mg/L

Aquatic Invertebrate Acute Toxicity: EC₅₀, water flea (*Daphnia magna*), static, 48-hour, immobilization is >100 mg/L

Aquatic Plant Toxicity: EC₅₀, green alga [*Pseudokirchneriella subcapitata* (formerly known as *Selenastrum capricornutum*)], static, biomass growth inhibition, 96-hour is 0.0864 mg/L

Toxicity to Microorganisms: EC₅₀, activated sludge, activated sludge test (OECD 209), respiration inhibition, 3-hour is >1,000 mg/L

Fish Chronic Toxicity Value (ChV):

ChV Value (mg/l)	Species	Test Type	Endpoint	Exposure Time
>10.2	Fathead minnow (<i>Pimephales promelas</i>)	Flow-through	Growth	36 days

Aquatic Invertebrates Chronic Toxicity Value:

ChV Value (mg/l)	Species	Test Type	Endpoint	Exposure Time
5.37	Water flea (<i>Daphnia magna</i>)	Static renewal	Number of offspring	21 days
41.8	Saltwater mysid (<i>Mysidopsis bahia</i>)	Flow-through	Survival	28 days

12. ENVIRONMENTAL INFORMATION

ENVIRONMENTAL FATE:

Data for Component: Penoxsulam Movement and Partitioning

Bioconcentration potential is low (BCF <100 or log Pow <3). Potential for mobility in soil is high (Koc between 50 and 150).

Henry's Law Constant (H): 1.66E⁻¹⁶ atm*m³/mole; 25°C
Estimated

Partition Coefficient, n-octanol/water (log Pow): -0.354
Measured

Partition Coefficient, soil organic carbon/water (Koc):
104 *Measured*

Persistence and Degradability

Indirect Photodegradation with OH Radicals:

Rate Constant	Atmospheric Half-life	Method
6.03E ⁻¹¹ cm ³ /s	2.1 hours	Estimated

Data for Component: Propylene glycol

Movement and Partitioning

Bioconcentration potential is low (BCF <100 or log Pow <3). Potential for mobility in soil is very high (Koc between 0 and 50).

Given its very low Henry's Constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

Henry's Law Constant (H): 1.2E⁻⁸ atm*m³/mole *Measured*

Partition Coefficient, n-octanol/water (log Pow):
-0.92 *Measured*

Partition Coefficient, soil organic carbon/water (Koc):
< 1 *Estimated*

Persistence and Degradability

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Biodegradation may occur under anaerobic conditions (in the absence of oxygen).

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Toxicity to Non-mammalian Terrestrial Species:

Dietary LC₅₀, mallard duck (*Anas platyrhynchos*) >4,310 ppm
Oral LD₅₀, bobwhite quail (*Colinus virginianus*) >2,025 mg/kg
Contact LD₅₀, Honey bee (*Apis mellifera*) >100 micrograms/bee
Oral LD₅₀, Honey bee (*Apis mellifera*) >110 micrograms/bee

Toxicity to Soil Dwelling Organisms:

NOEC, Earthworm (*Eisenia foetida*), adult, 56-day is 1,000 mg/kg
NOEC, Earthworm (*Eisenia foetida*), juvenile, 56-day is 250 mg/kg

Data for Component: Propylene glycol

Material is practically non-toxic to aquatic organisms on an acute basis (LC₅₀/EC₅₀/EL₅₀/LL₅₀ >100 mg/L in most sensitive species tested).

Fish Acute & Prolonged Toxicity: LC₅₀, rainbow trout (*Oncorhynchus mykiss*), 96-hour is 44,000 – 51,600 mg/L

Aquatic Invertebrate Acute Toxicity: EC₅₀, water flea (*Daphnia magna*), 48-hour, immobilization is 4,850 - 34,000 mg/L
LC₅₀, Saltwater mysid (*Mysidopsis bahia*), static, 96-hour is 18,800 mg/L

Aquatic Plant Toxicity: EC₅₀, green alga [*Pseudokirchneriella subcapitata* (formerly known as *Selenastrum capricornutum*)], biomass growth inhibition is 19,000 mg/L

Toxicity to Microorganisms: EC₅₀, activated sludge (OECD 209 Test), respiration inhibition, 3-hour is >1,000 mg/L

13. DISPOSAL CONSIDERATIONS

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities.

This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated and to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT Non-Bulk: Not Regulated
DOT Bulk: Not Regulated
IMDG: Not Regulated
ICAO/IATA: Not Regulated

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of this material.

15. REGULATORY INFORMATION

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

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 TITLE III (EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986) SECTIONS 311 AND 312:

Immediate (Acute) Health Hazard: No
Delayed (Chronic) Health Hazard: Yes
Fire Hazard: No
Reactive Hazard: No
Sudden Release of Pressure Hazard: No

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 TITLE III (EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986) SECTIONS 313: To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

PENNSYLVANIA (WORKERS AND COMMUNITY RIGHT-TO-KNOW ACT): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:

Component	CAS #	Amount
Propylene glycol	57-55-6	4.5%

U.S. TOXIC SUBSTANCES CONTROL ACT: All components of this product are either on the TSCA Inventory, are exempt from TSCA Inventory Requirements under 40 CFR 720.30, or comply with the PMN Polymer Exemption 40 CFR 723.250.

16. OTHER INFORMATION

HAZARD RATING SYSTEM

(NFPA):

Health 1
Flammability 0
Reactivity 0

MSDS STATUS:

New: 11/26/08
Revised: 01/15/09 (DAS102108)
Sections: 2 - 12, 14 - 16

LEGEND:

TWA Time Weighted Average
WEEL Workplace Environmental Exposure Level

The information herein is provided 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/user's responsibility to ensure that his activities comply with all federal, state, provincial, or local laws. The information presented here pertains only to the product as shipped.