SAFETY DATA SHEET

Octane® 2% SC

Herbicide

Section 1. Identification

GHS product identifier: Octane® 2% SC Herbicide
Product Description: Suspension Concentrate
EPA Registration No.: 71711-25-67690

Supplier's details

SePRO Corporation
11550 North Meridian Street
Suite 600
Carmel, IN 46032 U.S.A.
Tel: 317-580-8282
Toll free: 1-800-419-7779
Fax: 317-580-8290
Monday - Friday, 8am to 5pm E.S.T.
www.sepro.com

Emergency telephone number (with hours of operation)

INFOTRAC - 24-hour service 1-800-535-5053

The following recommendations for exposure controls and personal protection are intended for the manufacture, formulation and packaging of this product. For applications and/or use, consult the product label. The label directions supersede the text of this Safety Data Sheet for application and/or use.

Section 2. Hazards identification

Classified according to OSHA 29 CFR 1910.1200 HCS

Classification: None
Signal Word: None
Hazard Statements: None
Precautionary Statements: None
Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyraflufen-ethyl</td>
<td>129630-19-9</td>
<td>2.0%</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1</td>
<td>1 – 10%</td>
</tr>
<tr>
<td>*Other ingredients</td>
<td></td>
<td>88 - 97%</td>
</tr>
</tbody>
</table>

*Specific chemical identity and percentage of composition withheld as a trade secret*

Section 4. First aid measures

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.

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

Ingestion: Call poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. 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 an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Most important symptoms and effects, both acute and delayed: Refer to Section 11 – Toxicology Information

Note to Physician: All treatments should be based on observed signs and symptoms of distress

Section 5. Fire-fighting measures

Suitable extinguishing media: Water spray, foam, dry chemical, and carbon dioxide

Unsuitable extinguishing media: No information available.

Special protective equipment and precautions for fire-fighters: Firefighters and others who may be exposed should wear fully protective clothing and self-contained breathing apparatus. Due to the danger of acute toxicity to aquatic organisms, avoid permitting extinguishing media, such as water, foam, and dry chemicals, flow into ponds, rivers, and lakes.

Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products): Combustion or thermal decomposition will evolve toxic oxides of carbon and nitrogen (HCl, HF, CO₂, CO, NOₓ).
Section 6. Accidental release measures

General and Disposal: Use proper protective equipment to minimize personal exposure (see Section 8). Take all necessary action to prevent and to remedy the effects of the spill. Ensure that the disposal is in compliance with federal or local disposal regulations (see Section 13). Notify the appropriate authorities immediately (see Section 15 for any applicable Reportable Quantity (RQ)). Report to authorities if water enters watercourse or sewer.

Land Spill or Leak: Liquid spills on the floor or other impervious surfaces should be contained or diked and then absorbed with sawdust, sand, bentonite, or other absorbent clay. Collect contaminated absorbent, and place it in a properly labeled metal drum with lid. Thoroughly scrub the floor or other impervious surface with a strong industrial type detergent and rinse with water.

Liquid spills that soak into the ground should be dug up and placed in metal drums. When a large spill or leakage is found, wear protective clothing and respirator to avoid exposure. Avoid contaminated absorbents or water flow into ponds, rivers, and lakes, due to the danger of acute toxicity to aquatic organisms.

Section 7. Handling and storage

Notify the appropriate authorities immediately (see Section 15 for any applicable Reportable Quantity). Also report to authorities if contamination of waterways has occurred.

Handling Precautions:
- Open container with care.
- Do not contaminate water by cleaning of equipment or disposal of waste.
- Avoid contact with skin, eyes, or clothing.
- Do not eat, drink, smoke, or chew gum or tobacco while handling this product and until hands and face are thoroughly washed with soap and water.
- Do not use the toilet before thoroughly washing hands.
- Remove contaminated clothing immediately and wash thoroughly before reuse.

Storage Precautions:
- Keep container closed. Store in original container.
- Keep container at room temperature or store in a cool place.

Section 8. Exposure controls/personal protection

Engineering Controls (Local exhaust): Ventilation may be necessary under certain confined conditions. If practical, use ventilation at the sources of air contamination. Control airborne contaminants below the exposure guidelines (see below for any applicable OSHA / ACGIH exposure limits).

Personal Protective Equipment (PPE):

Eye/Face Protection: Wear protective eyewear when there is significant potential for eye contact.

Skin Protection: Wear long-sleeved shirt and long pants, socks and shoes, and chemical-resistant gloves.
Respiratory Protection: Ensure good ventilation. Avoid breathing mist. If ventilation is inadequate, use approved respiratory protection equipment when airborne exposure limits are exceeded.

Exposure Limits:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>10 mg/m³(IFV) TWA</td>
<td>Not established</td>
</tr>
<tr>
<td>CAS 107-21-1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TWA = time-weighted average
IFV = inhalable fraction and vapor

Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White “milky” liquid</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight non-specific odor</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>6.84 at 24°C (as a 1% w/w solution)</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Data not available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Data not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>≥110°C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Data not available</td>
</tr>
<tr>
<td>Upper/Lower flammability or explosive limits</td>
<td>Not explosive</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>1.04 x 10⁻⁶ Pa at 25°C (technical active ingredient)</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.023 g/cm³ at 20°C</td>
</tr>
<tr>
<td>Solubility(ies) in water</td>
<td>Data not available</td>
</tr>
<tr>
<td>Auto ignition temperature</td>
<td>None observed up to 110°C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Non-Newtonian: dependent on shear rate</td>
</tr>
</tbody>
</table>

Section 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>Non-reactive.</td>
</tr>
<tr>
<td>Chemical stability</td>
<td>Stable under normal conditions</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>None known.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Combustion.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>None known.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Combustion or thermal decomposition will evolve toxic oxides of carbon and nitrogen (CO₂, CO, NOₓ).</td>
</tr>
</tbody>
</table>
Section 11. Toxicological information

The following data were developed using Octane 2%SC:

Acute Studies:

<table>
<thead>
<tr>
<th></th>
<th>Male: &gt;5,000 mg/kg</th>
<th>Female: &gt;5,000 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50 (rat):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal LD50 (rat):</td>
<td>&gt;2,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Inhalation LC50 (rat):</td>
<td>&gt;5.53 mg/L (4 hrs)</td>
<td></td>
</tr>
<tr>
<td>Eye irritation (rabbit):</td>
<td>Slightly irritating</td>
<td></td>
</tr>
<tr>
<td>Skin irritation (rabbit):</td>
<td>Slightly irritating</td>
<td></td>
</tr>
<tr>
<td>Skin sensitization (guinea pig):</td>
<td>Non-sensitizing</td>
<td></td>
</tr>
</tbody>
</table>

The following data were developed using pyraflufen-ethyl technical:

Subchronic and Chronic Effects:

A 90-day rat feeding study was conducted at dose levels up to 15,000 ppm pyraflufen-ethyl. Liver and kidney effects were observed at the highest dose. The no observed effect level (NOEL) in this study was considered to be 1,000 ppm (~90 mg/kg body weight/day). In a 90-day oral toxicity study in dogs, pyraflufen-ethyl was administered at dose levels up to 1,000 mg/kg body weight/day. No effects in body weight or organ weight, clinical chemistry, hematology, histopathology, or gross pathology were observed. In long term studies, no effects were observed in dogs exposed for one year to a maximum dose of 1,000 mg/kg body weight/day. In a two year rat chronic study, liver and kidney effects were observed at 2,000 ppm. The NOEL was 400 ppm (~20mg/kg body weight/day).

Cancer Effects:

Pyraflufen ethyl was tested in lifetime studies in rats and mice. There was no evidence of carcinogenicity in the rat at doses as high as 10,000 ppm (~470 mg/kg body weight/day). In the mouse study, the incidence of hepatocellular adenomas was increased in mice receiving 5,000 ppm (~ 524 - 547 mg/kg body weight/day), a dose level considered to be in excess of a MTD (maximum tolerated dose). Based on the combined incidence of male mouse hepatocellular adenomas, carcinomas, and/or hepatoblastomas, the EPA has classified pyraflufen-ethyl as "Likely to be Carcinogenic to Humans". The EPA classification of pyraflufen-ethyl represents potential hazard without consideration of exposure information. The active ingredient pyraflufen-ethyl is not classified as a carcinogen by NTP, OSHA, or IARC.

Teratogenicity (Birth Defects): There is no evidence of developmental toxicity.

Reproductive Effects: There is no evidence of reproductive toxicity.

Neurotoxicity: There is no evidence of neurotoxicity after oral exposure in acute or subchronic studies.

Immunotoxicity: Suppression of the humoral immune response was measured in male rats exposed to 12,000 ppm of pyraflufen-ethyl (equivalent to ~ 943 mg/kg body weight/day) in a 28-day feeding study, the same dose at which systemic toxicity was evident. No humoral immune suppression was observed in female rats at any dose level.
Mutagenicity (Genetic Effects): There is no evidence of mutagenicity nor genotoxicity.

Toxicity of other components: Oral administration of ethylene glycol has been demonstrated to produce reproductive and developmental toxicity in experimental animals.

Section 12. Ecological information

Ecological data were developed using pyraflufen-ethyl technical.

Environmental Precautions: This product is toxic to fish and aquatic invertebrates. This product may contaminate water through drift of spray in wind or via runoff events. Use care when applying in areas adjacent to any body of water. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate. Do not apply when weather conditions favor drift from treated areas.

Section 13. Disposal considerations

General Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Any disposal practice must be in compliance with all federal, state/provincial, and local laws and regulations. State (provincial) and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Chemical additions, processing, storage or otherwise altering this material may make the waste disposal information presented in this MSDS incomplete, inaccurate, or otherwise inappropriate. Waste characterization and disposal compliance are the responsibility solely of the party generating the waste or deciding to discard or dispose of the material.

Refer to appropriate federal (RCRA: 40 CFR.261), state/provincial, or local requirements for proper classification information. For regulatory information on the ingredient components, see Section 15.

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray, 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.

Container Disposal: Nonrefillable plastic container (Less than 5 gallons)
Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.
Section 14. Transport information

DOT: Not regulated.
IATA: UN 3082, Environmentally hazardous substance, liquid, n.o.s., (pyraflufen-ethyl), Class 9, PG III.
IMDG: UN 3082, Environmentally hazardous substance, liquid, n.o.s., (pyraflufen-ethyl), Class 9, PG III, EmS: F-A, S-F, Marine Pollutant

Octane 2%SC is not regulated for transport unless shipped by water or air.

Section 15. Regulatory information

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION
Harmful if absorbed through skin.

U.S. Federal Regulatory Information:
EPA Registration Number: 71711-25
TSCA Inventory: Registered pesticide; exempt from TSCA

SARA Title III Notification and Information:
Section 302 (EHS) Ingredients:
Section 304 (EHS)
or CERCLA Ingredients (RQ):

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>Final Reportable Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1</td>
<td>5,000 lbs</td>
</tr>
</tbody>
</table>

Section 313 Ingredients: Ethylene glycol

U.S. State Regulatory Information:
U.S. State Right-to-Know (RTK) Ingredients:
Ethylene glycol
California Proposition 65 List:
• None

Section 16. Other information
HMIS® Hazard Rating:
Health: 1
Fire: 0
Physical Hazard: 0

NFPA Hazard Rating:
Health: 2
Fire: 1
Reactivity: 0
Specific Hazard: None

Prepared by: Regulatory Affairs
Date: 12/22/15
Reason for Editing: Updated Section 14.

Notice to reader
To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.