

## MATERIAL SAFETY DATA SHEET

AGRILIANCE, LLC  
P.O. Box 64089, St. Paul, MN 55164-0089

**PRODUCT NAME**

For Emergency Call: 877-424-7452 or  
Chem Trec: 800-424-9300

**Avalanche Bulk Pack  
Herbicide**

Effective Date: 10/15/02

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**I. IDENTIFICATION**


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**CHEMICAL NAME OF PRIMARY COMPONENT(S):** Carfentrazone-ethyl

**FORMULA:** C<sub>15</sub>H<sub>14</sub>N<sub>3</sub>O<sub>3</sub>F<sub>3</sub>Cl<sub>2</sub>

**CAS # & NAME:** 128639-02-1

**EPA Reg No.** 279-3242-1381

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**II. INGREDIENTS/SUMMARY OF HAZARDS**


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INGREDIENT(S)	CAS NUMBER	PEL/TLV	PERCENT
Carfentrazone-ethyl	12839-02-1	None	21.33
Aromatic Hydrocarbons	64742-95-6	100 ppm (supplier)	<24
Naphthalene	91-20-3	10 ppm 15ppm STEL	<3.36
Propylene Glycol	57-55-6	10 mg/m <sup>3</sup> WEEL	<4.2
Surfactant Blend	None	None	<6.0
Xylene	1330-20-7	100 ppm 150 ppm STEL	<0.2

**SARA TITLE III HAZARD CLASSIFICATION**

IMMEDIATE (ACUTE) HEALTH	Yes
DELAYED (CHRONIC) HEALTH	Yes
FIRE	Yes
SUDDEN RELEASE OF PRESSURE	No
REACTIVE	No

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### III. PHYSICAL DATA

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**SPECIFIC GRAVITY:** 1.056  
**BOILING POINT:** N/A  
**FREEZING POINT:** N/A  
**VAPOR PRESSURE:** N/A  
**SOLUBILITY IN WATER:** Completely soluble  
**APPEARANCE:** Off-white liquid  
**ODOR:** Aromatic solvent

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### IV. FIRE AND EXPLOSION HAZARD DATA

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**FLASH POINT:** 104° C (220° F)  
**FLAMMABLE LIMITS IN AIR:** N/A  
**AUTOIGNITION TEMPERATURE:** N/A  
**EXTINGUISHING MEDIA:** Foam, CO2 or dry chemical. Soft stream water fog only if necessary. Contain all runoff.  
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Slightly combustible. This material may support combustion at elevated temperatures.  
**SPECIAL FIRE FIGHTING PROCEDURES:** Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors generated.

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### V. REACTIVITY DATA

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**STABILITY:** Stable  
**CONDITIONS TO AVOID:** Excessive heat and fire.  
**MATERIALS TO AVOID:** N/A  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride and hydrogen fluoride.  
**HAZARDOUS POLYMERIZATION:** Will not occur.

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### VI. HEALTH HAZARD DATA/FIRST AID PROCEDURES

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#### TOXICOLOGY DATA:

**Acute Oral LD<sub>50</sub> (rat):** 4077 mg/kg (rat) (similar formulation)  
**Acute Dermal LD<sub>50</sub> (rat):** >4000 mg/kg (rat) (similar formulation)  
**Acute Inhalation LC<sub>50</sub>(4hr rat):** >6.31 mg/L/4 hrs. (rat) (similar formulation)  
**Eye Irritation (rabbit):** Expected to be mildly irritating to the eyes.  
**Dermal Irritation (rabbit):** Expected to be mildly irritating to the skin.  
**Dermal Sensitization:** Not expected to produce skin sensitization.

**CARCINOGENICITY, TERATOGENICITY, MUTAGENICITY:** In studies with laboratory animals, carfentrazone-ethyl did not cause reproductive toxicity, teratogenicity, or carcinogenicity. An overall absence of genotoxicity has been demonstrated in tests of mutagenicity, DNA damage and chromosome aberrations. In a 2-year inhalation studies conducted by the National Toxicology Program (NTP), there was no evidence of carcinogenic activity of naphthalene in male mice exposed to 10 or 30 ppm. There was some evidence of carcinogenic activity in female mice, based on increased incidences of pulmonary alveolar/bronchiolar adenomas. In another 2-year inhalation study conducted by the NTP, there was clear evidence of carcinogenic activity in male and female rats based on increased incidences of respiratory epithelial adenoma and olfactory epithelial neuroblastoma of the nose.

**PRIMARY ROUTES OF ENTRY:** Ingestion, inhalation

**EFFECTS OF SINGLE OVEREXPOSURE:** Signs of toxicity in laboratory animals included mydriasis, cyanosis, ataxia, dyspnea, lacrimation, and diarrhea. Inhalation of aromatic hydrocarbon vapors may cause dizziness, disturbances in vision, drowsiness, respiratory irritation and eye, skin and mucous membrane irritation. Naphthalene, if ingested, may cause red blood cell hemolysis, especially in individuals with glucose-6-phosphate dehydrogenase deficiency. In humans, ingestion of large amounts of propylene glycol has resulted in reversible central nervous system depression including stupor, rapid breathing and heartbeat, profuse sweating and seizures.

**EFFECTS OF REPEATED OVEREXPOSURE:** Chronic exposure to aromatic hydrocarbons may cause headaches, dizziness, loss of sensations or feelings (such as numbness), and liver and kidney damage.

**OTHER EFFECTS OF OVEREXPOSURE:** Symptoms of overexposure include pinpoint pupils, muscular incoordination, labored breathing, tearing and diarrhea.

**EMERGENCY AND FIRST AID PROCEDURES:**

**Swallowing:** Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. See a medical doctor immediately.

**Skin:** Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

**Inhalation:** Remove person to fresh air. If breathing difficulty or discomfort occurs and persists, obtain medical attention.

**Eyes:** Flush with water for at least 15 minutes. If irritation occurs and persists, obtain medical attention.

**NOTES TO PHYSICIAN:** This product is expected to have low oral, dermal and inhalation toxicity. It is expected to be mildly irritating to the eyes and skin. This product contains light aromatic hydrocarbons that can produce a severe pneumonitis or fatal pulmonary edema if aspirated during vomiting. Consideration should be given to gastric lavage with an endotracheal tube in place. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

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## VII. PRECAUTIONS FOR SAFE HANDLING AND USE

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**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Isolate and post spill area. Remove nearby ignition sources (such as smoking, matches or open flames). Keep unprotected persons and animals out of the area. Keep material out of lakes, streams, ponds and sewer drains. Dike to confine spill and absorb with a non-combustible absorbent such as clay, sand or soil. Vacuum, shovel or pump waste into a drum and label contents for disposal.

To clean and neutralize spill area, tools and equipment, wash with a suitable solution of caustic or soda ash, and an appropriate alcohol (i.e., methanol, ethanol or isopropanol). Follow this by washing with a strong soap and water solution. Absorb, as above, any excess liquid and add to the drums of waste already collected.

**WASTE DISPOSAL METHOD:** If spilled material cannot be disposed of by use according to label instructions, an acceptable method of disposal is to incinerate in accordance with local, state and federal environmental laws, rules, standards and regulation. However, because acceptable methods of disposal may vary by location and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

**CONTAINER DISPOSAL:** Containers which held this material should be cleaned, prior to disposal, by triple rinsing and then recycled or disposed of in solid waste land fill or by other means approved by state and local authorities.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Store in a cool, dry, well-ventilated place. Do not use or store near heat, open flame or hot surfaces. Store in original containers only. Keep out of reach of children and animals. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

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## VIII. SPECIAL PROTECTION INFORMATION

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### PROTECTIVE EQUIPMENT SHOULD BE USED DURING THE FOLLOWING PROCEDURES:

- Manufacture or formulation of this product.
- Repair and maintenance of contaminated equipment.
- Clean up of leaks and spills.
- Any other activity that may result in hazardous exposures
- Refer to product label for PPE required for labeled use

**RESPIRATORY PROTECTION:** For splash, mist or spray exposure wear, as a minimum, a properly fitted half-face or full-face air-purifying respirator which is approved for pesticides (NIOSH/MSHA). Respirator use and selection must be based on airborne concentrations.

**VENTILATION:** Local exhaust

**PROTECTIVE CLOTHING:** Chemical resistant gloves, coveralls and foot coverings.

**EYE PROTECTION:** Safety goggles

**USER SAFETY RECOMMENDATIONS:** Safety showers and eye wash should be easily accessible.

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## IX. REGULATORY STATUS

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**TSCA INVENTORY STATUS:**

**TRANSPORTATION STATUS:**

**DOT INFORMATION:** Not regulated

Container Capacity	Proper Shipping Name	Hazard Class	Label	Packing Group

### SARA TITLE III

**Section 302-304 (40 CFR 350):** Not listed

**Extremely Hazardous Substance (EHS):** Not listed

**Section 312, Reporting (40 CFR 370):** The threshold planning quantity (TPQ) for this product, if treated as a mixture, is 10,000 lbs.

**SARA/OSHA Hazardous Chemical Reporting Quantity:** 10,000 lbs

**Section 313, Toxic Chemicals:** This product contains the following ingredients subject to Section 313 reporting requirements: (naphthalene)

**Reportable Quantity (RQ):**

**CERCLA:** Listed: Naphthalene @ <3.36% RQ = 100 lbs.  
Xylene @ <0.2% RQ = 100 lbs.

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## X. REFERENCES

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THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH,  
BUT, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE.