



AVENGER PRODUCTS, LLC

Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Avenger® Weed Killer Concentrate

EPA Reg. Number.: 92967 – 1

Description: Liquid Herbicide Concentrate

Chemical Composition: Liquid Concentrate

Company:

Avenger Organics, LLC • 3057 Summer Oak Place, Buford, GA, 30518

Telephone: 678-546-5009 • **Website:** avengerorganics.com • **Email:** support@avengerorganics.com

Emergency Phone Number: CHEMTREC 24 Hour Number (800) 424-9300

2. HAZARD(S) IDENTIFICATION

CAUTION!

Health Hazards: Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing.

Signs and Symptoms of Exposure: Product may be irritating to the skin, eyes, nose and throat.

Medical Conditions Generally Aggravated by Exposure: Persons with allergies or pre-existing skin conditions should avoid contact with this product.

Hazardous Materials Identification System - HMIS:

- 1 Health Hazard - Mild skin irritant
- 2 Flammability - Flashpoint 122° F (52°C), as determined by TAG Closed Cup
- 0 Reactivity - Stable
- G Protection - Safety glasses, gloves



3. COMPOSITION/INFORMATION ON INGREDIENTS

Active Ingredient: d-Limonene (technical grade):

Composition:

Component	CAS No.	% by weight (approximate)
d-Limonene	5989-27-5	74 to 78%
<i>Other Ingredients</i>		
Castor Oil		1 to 4%
Emulsifiers		18 to 23%

The specific chemical identity is being withheld because it is trade secret information of Avenger Products, LLC.

4. FIRST AID MEASURES

Emergency & First Aid Procedures:

- **Eye contact:** Remove contact lenses at once. Flush with water for at least 15 minutes.
- **Skin contact:** Wash affected area with copious amounts of soap and water. If irritation develops, seek medical attention.
- **Ingestion:** Seek medical attention immediately. Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Do not leave victim unattended. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.
- **Inhalation:** If symptoms of overexposure are experienced, evacuate to fresh air.

If any symptoms persist, seek medical attention.

5. FIRE-FIGHTING MEASURES

- **Flash Point:** 126°F (52°C)
- **Extinguishing Media:** Carbon dioxide, foam or dry chemical
- **Special Fire Fighting Procedures:** SCBA recommended. Smother to exclude air. Do not use water. Handle as an oil fire.
- **Unusual Fire and Explosive Hazards:** Combustible liquid. Keep away from heat, sparks, and open flame.
- **Hazardous Decomposition Materials:** Smoke may be acrid and the fumes may be irritating. Burning generates CO, CO₂, and smoke.
- **Conditions to Avoid for Stability:** Avoid temperatures over 122° F (50°C)

6. ACCIDENTAL RELEASE MEASURES

Steps to be Taken if Material is Released or Spilled: Use protective gloves to avoid skin contact. Small spills can be wiped up. Large spills should be absorbed by dirt, sand, or other suitable absorbents for disposal. Use personal protection recommended in section 8.



7. HANDLING AND STORAGE

Precautions to be Taken in Handling and Storing: Take usual precautions for combustible liquids. Store in original container and out of the reach of children, preferably in a locked storage area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment (PPE): Applicators and other handlers must wear: Long sleeved shirt and pants, Shoes plus socks and Protective eyewear.

- **Eye Protection:** Safety goggles or glasses suggested.
- **Skin Protection:** Oil resistant gloves.
- **Appropriate Hygienic Practices:** Wash thoroughly after handling. Launder contaminated clothing before re-use.

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering controls: No special requirement when used as recommended.

Respiratory protection: No special requirement when used as recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, slight yellow liquid
Upper/lower flammability or explosive limits	N/A
Odor	Orange or lemon-lime aroma
Vapor pressure	N/A
Odor threshold	N/A
Vapor density	N/A
pH:	Aqueous mixture containing 1% v/v of Concentrate has a pH of 4.8 at 73°F (23°C)
Relative density	N/A
Melting point/freezing point	N/A
Solubility(ies)	N/A
Initial boiling point and boiling range	N/A
Flash point	122°F (52°C), as determined by TAG Closed Cup
Evaporation rate	N/A
Flammability (solid, gas)	N/A
Upper/lower flammability or explosive limits	N/A
Vapor pressure	N/A
Vapor density	N/A
Relative density	N/A
Solubility(ies)	N/A
Partition coefficient: n-octanol/water	N/A
Auto-ignition temperature	N/A
Decomposition temperature	N/A
Viscosity	1.50 at 23°C
Gravity	0.854 g/ml (53.3 lb / cu. ft.) at 68°F (20°C)



10. STABILITY AND REACTIVITY

Reactivity

- No data

Chemical stability

- The product is a stable substance and polymerization or negative reactions will not occur

Other

- N/A

11. TOXICOLOGICAL INFORMATION

The toxicity parameters of the primary ingredient, d-Limonene, are as follows:

- It is not acutely toxic.
- Oral: LD50 >5 g/kg, rabbit
- Dermal: LD50 >5 g/kg, rabbit
- Skin: The skin irritancy of limonene in guinea pigs and rabbits is considered moderate and low, respectively.
- Inhalation: LC50 >1000 ppm

This substance contains no materials subject to the reporting requirements of SARA TITLE III SECTION 313.

Chronic Toxicity: Not listed as a carcinogen (OSHA, NTP, IARC, or ACGIH)

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: Product may be toxic to aquatic organisms.



13. DISPOSAL CONSIDERATION

Container Disposal: DO NOT reuse any part of this packaging. Dispose of all containers and packaging in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of the smoke.

14. TRANSPORTATION INFORMATION

TDG Status: Hazardous DOT Label/Placard [exemption § 173.150(f) applies

IMO Status: Hazardous Highway/Rail: per requirements for Combustible Liquids

IATA Status: Hazardous Air/Ship: per requirements for Flammable Liquids

SHIPPING CLASSIFICATION:

- Proper Shipping Name: TERPENE HYDROCARBONS, N.O.S.
- Hazard Class: 3
- Identification No.: UN2319
- Packing Group: III
- The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

15. REGULATORY INFORMATION

Registration for use as an herbicide has been approved at the U.S. Environmental Protection Agency (EPA).
EPA Registration No. 92967 – 1

16. OTHER INFORMATION

National Fire Protection Association Hazard Ratings - NFPA(R):

- 1 Health Hazard - Slight
- 2 Flammability - Moderate
- 0 Reactivity - Minimal

Key Legend Information:

- ACGIH American Conference of Governmental Industrial Hygienists
- OSHA Occupational Safety and Health Administration
- NTP National Toxicology Program
- IARC International Agency for Research on Cancer 4

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