Cutting Edge Formulations, Inc.
3057 Summer Oak Place
Buford, GA 30518
April, 2013

MATERIAL SAFETY DATA SHEET

For Avenger® Weed Killer Concentrate
(EPA Reg. No. 82052 – 1)

Emergency Phone Numbers:
Cutting Edge Formulations: (678) 546-5009
CHEMTREC 24 Hour Number (800) 424-9300

Section 1 – IDENTIFICATION

Product Name: Avenger® Weed Killer Concentrate

Section 2 – INGREDIENT INFORMATION

Avenger Weed Killer Concentrate consists of:
d-Limonene (technical grade): 74 to 78% (CAS Number: 5989-27-5)
Castor Oil: 1 to 4%
Emulsifiers: 18 to 23%

Section 3 –HEALTH HAZARDS IDENTIFICATION

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.

Emergency & First Aid Procedures :
Eyes: Remove contact lenses at once. Flush with water for at least 15 minutes.
Skin: 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.

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

Hazardous Materials Identification System - HMIS:

1 Health Hazard - Mild skin irritant
2 Flammability - Flashpoint 122° F (50°C), as determined by TAG Closed Cup
0 Reactivity - Stable
G Protection - Safety glasses, gloves

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)
Ecotoxicological Information: Product may be toxic to aquatic organisms.

Section 4 –PHYSICAL DATA

Appearance: Clear, colorless liquid
Odor: Orange or lemon-lime aroma
Specific Gravity: 0.854 g/ml (53.3 lb/ cu. ft.) at 68°F (20°C)
Flashpoint: 122°F (50°C), as determined by TAG Closed Cup
pH: aqueous mixture containing 1% v/v of Concentrate has a pH of 4.8 at 73°F (23°C)
Viscosity: 1.50 at 23°C

Section 5 – FIRE AND EXPLOSION HAZARD DATA

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, CO_2, and smoke.
Conditions to Avoid for Stability: Avoid temperatures over 122° F (50°C)

Section 6 – SPILL OR LEAK PROCEDURES

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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.

Section 7 –SPECIAL PROTECTION INFORMATION

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.

Section 8 – SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing: Usual precautions for combustible liquids.

Section 9 – REGULATORY INFORMATION

Registration for use as a herbicide has been approved at the U.S. Environmental Protection Agency (EPA). EPA Registration No. 82052 – 1

Section 10 – 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.

Section 11 – ADDITIONAL 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

The information contained herein is based on current knowledge and experience: no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information obtained by the user. No warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or that any such use will not infringe any patent. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customers, and the protection of the environment. This information is furnished upon the condition the person receiving it shall determine the suitability for the particular purpose. This MSDS is to be used as a guideline for safe work practices and emergency response.

CUTTING EDGE® FORMULATIONS

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