



AVENGER PRODUCTS, LLC

Safety Data Sheet

Issuing Date: 20 October 2020

Revision Date: 20 October 2020

Revision Number: 3

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Avenger AG[®] OPTIMA Burndown Herbicide

EPA Reg. Number: 92967-4

Description: Liquid Herbicide Concentrate

Company: Avenger Products, LLC

Address: 1605 Candler Road
Gainesville, GA 30507

Supplier Phone Number: Phone: (678) 546-5009

Supplier Email: support@avengerorganics.com

Emergency Telephone Number: Info Trac Chemical Response System
1-800-535-5053 (USA/Canada-24 hours) 1-352-323-3500 (International)

2. HAZARDS IDENTIFICATION

Classification:

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard Classification:

Flammable liquid	Category 3
Skin irritant	Category 2
Skin sensitization	Category 1B
Specific Target Organ Toxicity – Single Exposure	Category 3
Aspiration toxicity	Category 1

Label Elements:

Signal Word:	Danger	
		
Appearance: Clear, slightly yellow	Physical State: Non-viscous Liquid	Odor: Citrus

Hazard Statements:

H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H335	May cause respiratory irritation

Precautionary Statements - Prevention:

P261	Avoid breathing dust / fumes / gas / mist / vapors / spray
P270	Do not eat, drink or smoke when using the product
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources
P262	Do not get in eyes, on skin, or on clothing
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER and seek medical advice
P303 + P361 + P353	OF ON SKIN (or hair): Remove contaminated clothing. Rinse skin with water /shower.
P391	Collect spillage
P233	Keep container tightly closed
P403 + P235	Store in well ventilated location. Keep cool.
P273	Avoid release to the environment.

Precautionary Statements - Response:

P301 + P331 + P314	If Swallowed: Do not induce vomiting. Rinse mouth. If unwell, seek medical attention
P302 + P350 + P315	If on Skin: Gently wash with plenty of soap and water. Seek medical attention if irritation persists.
P304 + P340 + P315	If Inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If concerned seek medical attention
P305 + P338 + P315	If in Eyes: Flush with water for several minutes. Remove contact lenses if easy to do so and continue rinsing. If eye irritation persists, seek medical attention.
P306 + P362	If on Clothes: Remove and wash clothing before reuse.

Precautionary Statements – Disposal:

P501	Dispose of contents / container to approved waste facility in accordance with local laws
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NFPA Ratings		HMIS Ratings	
Health	2	Health	1
Flammability	2	Fire	2
Reactivity	0	Reactivity	0
Specific Hazard	Not Available	Personal Protection	Safety glasses, gloves

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
d-Limonene (95% technical grade)	5989-27-5	55%	-
Castor oil ethoxylate (100%)	61791-12-6	5 to 15%	-
Emulsifiers	-	25 to 30%	-

4. FIRST AID MEASURES

General Advice:	Show this Safety Data Sheet to the doctor in attendance.
Eye Contact:	Remove contact lenses at once. Rinse thoroughly with plenty of water for 15 minutes, also under the eyelids. If symptoms persist, seek medical assistance.
Skin Contact:	Wash affected area with soap and water. If irritation persists, seek medical Attention.

Inhalation:	Remove to fresh air. If symptoms persist, seek medical assistance.
Ingestion:	Seek medical assistance immediately. Do NOT induce vomiting. Rinse mouth with plenty of water, then drink 1 glass of water. Do not leave victim unattended. Never give anything by mouth if victim is unconscious.
<u>Indication of any immediate medical attention and special treatment needed:</u>	
Notes to physician:	Treat symptomatically. May cause sensitization on susceptible persons.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide, foam or dry chemical.

Unsuitable Extinguishing Media

Water.

Specific Hazards Arising from the Chemical

SCBA recommended. Smother to exclude air. Do not use water, handle as an oil fire.

Hazardous Combustion Products

Combustible liquid, keep away from heat, sparks and open flame.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions (protective equipment and emergency procedures)

Personal Precautions: Avoid contact with eyes and skin. Wear eye protection and skin protection.

Environmental Precautions

Environmental Precautions: Refer to protective measures listed in Sections 7 and 8.

Methods and Material for Containment and Cleaning Up

Methods for Containment: Prevent further leakage or spillage if safe to do so. Soak up with adsorbent material.

Methods for Cleaning up: Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling: Combustible liquid. Store in original container, preferably in locked storage area.

Conditions for Safe Storage (including any incompatibilities)

Storage: Keep container tightly closed, away from heat and sparks.

Incompatible Products: None known based on information supplied.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protective Equipment: Applicators and other handlers must wear long sleeved shirt and pants. Shoes with socks and appropriate protective gear. Safety glasses and protective clothing.

Other Exposure Guidelines: No data available

Appropriate Engineering Controls

Engineering Measures Showers, Eyewash stations, Ventilation systems

Individual Protection Measures (such as personal protective equipment)

Eye / Face Protection: Wearing safety glasses with side shields (or goggles) is recommended.

Skin and Body Protection: Wearing of protective gloves and protective clothing is recommended.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State / Appearance: Clear, slight yellow liquid

Odor: Orange or lemon-lime aroma

Odor Threshold: No data available

pH: 4.8 (1% solution v/v at 23°C)

Flash Point: 50 °C / 123 °F (TAG closed cup)

Upper / Lower Flammability Limit: No data available

Flammability (solid, gas): No data available

Flammability Limit in Air: No data available

Upper Flammability Limit: No data available

Lower Flammability Limit: No data available

Vapor Pressure: No data available

Vapor Density: No data available

Specific Gravity: 0.854 g/mL (53.3 lb/cu.ft.) at 20°C (68°F)

Water Solubility: No data available

Initial Boiling Point: No data available

Partition Co-Efficient (n-octanol/water): No data available

Autoignition Temperature: No data available

Decomposition Temperature: No data available

Dynamic Viscosity: No data available

Evaporation Rate: No data available

Melting / Freezing Point: No data available

VOC Content (%): 55%

10. STABILITY AND REACTIVITY

Reactivity:	No data available.
Chemical Stability:	Stable under recommended storage conditions.
Possibility of Hazardous Reactions:	None under normal processing.
Hazardous Polymerization:	Hazardous polymerization does not occur.
Conditions to Avoid:	None known based on information supplied.
Incompatible Materials:	None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Product Information:	Product does not present an acute toxicity hazard based on known or supplied information. Based on d-Limonene, the primary ingredient.
Overview:	Not acutely toxic
Eye Contact:	Moderate irritancy
Skin Contact Irritancy:	Moderate in Guinea pigs, low in Rabbits
Ingestion:	LD ₅₀ > 5g/Kg, rabbit
Inhalation:	LC ₅₀ > 1000ppm
Chronic Toxicity:	No known effect based on information supplied. Not Listed as carcinogen.
Target Organ Effects:	Skin
Aspiration Hazard:	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Specific data regarding toxicity to fish and other aquatic organisms is not available for this product. Care should always be taken to prevent insecticides from entering aquifers. Product may be toxic to aquatic life.
Persistence and Degradability:	No information available.
Bioaccumulation:	No information available.
Other Adverse Effects:	Moderate in Guinea pigs, low in Rabbits

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal Methods:	This material, as supplied, is considered a hazardous waste according to Federal regulations (40 CFR 261). If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Do not puncture or incinerate containers, even empty. Dispose in accordance with federal, state, and local regulations.
Contaminated Packaging:	Dispose of contents/containers in accordance with local regulations
US EPA Waste Number:	D001
California Hazardous Waste Codes:	232

14. TRANSPORT INFORMATION

Ground (DOT)

Proper Shipping Name:	Terpene hydrocarbons, n.o.s. (d-Limonene)
UN Number:	UN 2319
Hazard Class:	3
Packing Group:	3

Air (IATA)

Proper Shipping Name:	Terpene hydrocarbons, n.o.s. (d-Limonene)
UN Number:	UN 2319
Hazard Class:	3
Packing Group:	3

Marine (IMDG)

Proper Shipping Name:	Terpene hydrocarbons, n.o.s. (d-Limonene)
UN Number:	UN 2319
Hazard Class:	3
Packing Group:	3

15. REGULATORY INFORMATION

This SDS is prepared to meet the requirements of OSHA and the GHS, and may contain precautionary statements and signal words that are different than or in addition to the pesticide label, which is regulated through the US EPA under Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA").

US Federal Regulations

This product is registered with the U.S. Environmental Protection Agency (EPA) as a herbicide (EPA Registration Number: 92967-1)

Components listed below are present on the following U.S. Federal chemical lists:

Ingredients	CAS #	TSCA Inventory	CERCLA Reportable Quantity (RQ) 40 CFR 117.302	SARA title III: Sec. 302 Extremely hazardous substance 40 CFR 355	SARA Title III: Sec 313 40 CFR 372 Specific Toxic Chemical
d-Limonene	5989-27-5	Yes	None	None	No

16. OTHER INFORMATION

This SDS is prepared to meet the requirements of OSHA and the GHS, and may contain precautionary statements and signal words that are different than or in addition to the pesticide label, which is regulated through the US EPA under Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA").

Prepared By: Avenger Products, LLC
1605 Candler Road
Gainesville, GA 30507

Phone: (678) 546-5009

Revision Date: 21 October, 2020

Revision Note: Revision: 3 Updated Signal Word to "Danger"

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet