## Vinegar Weed & Grass Killer

A Horticultural Vinegar Biopesticide – for Non-Selective Control of Herbaceous Broadleaf Weeds and Weed Grasses which Surround Food crops, Non-food crops and Non-production Agricultural, Farmstead, Right-of-Way, and Institutional Land Sites

### For Organic Production

Active Ingredient:	
Acetic Acid	20.0%*
Other Ingredients	80.0%
Total	100.0%
*Equivalent to 200 grain vinegar by titration	

#### KEEP OUT OF REACH OF CHILDREN

# DANGER – PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.) See label side panels for First Aid and for additional precautionary statements.

#### FIRST AID

**IF IN EYES:** Hold eyelids open and flush with a steady, gentle stream of water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by poison control center or doctor. Do not give anything by mouth to an unconscious person.

**IF INHALED**: 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.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-858-7378 for emergency medical treatment.

#### NOT FOR HUMAN CONSUMPTION

**Distributed by:** *Energen Carolina, LLC.* 834 Dupont Rd., Charleston, SC 29407, USA 843-556-6506 EPA Registration No. 85208-1-92429 EPA Est. No. 072838-IN-003

#### **PRECAUTIONARY STATEMENTS**

# Hazards to Humans and Domestic Animals DANGER

Corrosive - causes irreversible eye damage. Wear goggles or face shield when handling. Harmful if absorbed through skin. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. In case of contact, immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists. Wash thoroughly with soap and water after handling. Wear personal protection equipment when handling and/or applying.

**PERSONAL PROTECTION EQUIPMENT (PPE):** Applicators and other handlers must wear appropriate protective eyewear, such as face shield or goggles and face mask (with MSHA/NIOSH approval number prefix such as N95, R-95, or P-95), long sleeved shirt and long pants, waterproof gloves and shoes plus socks.

**USER SAFETY REQUIREMENTS:** Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for PPE, use detergent and hot water. Keep and wash PPE separately from other laundry.

## **USER SAFETY RECOMMENDATIONS:** Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **Environmental Hazards:**

- This pesticide is toxic to birds exposed to spray drift, direct treatment or residues on crops or weeds. Do not apply this product or allow to drift to crops or weeds if birds are actively visiting the treatment area.
- This pesticide is toxic to fish and aquatic invertebrates.
- For terrestrial use only. Do not apply directly to water.

## **DIRECTIONS FOR USE:**

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

Avoid application to reactive metals such as aluminum, tin, iron or items such as fencing or lawn furniture in order to prevent staining, mottling, or otherwise interfering with finished metal surfaces. In case of contact, rinse the sprayed surfaces with water.

Avoid repeated applications on concrete, since this product, as all other acids may result in etching of cement.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard., 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry to treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water) is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

## NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT Within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

Keep unprotected persons out of the treated areas until spray has dried.

Vinegar Weed & Grass Killer is a quick-acting, non-selective contact herbicide containing an organic acid for which the residues degrade promptly in the soil. Foliar contact results in rapid desiccation and control of annual weeds and grasses, and top growth reduction of herbaceous perennial weeds and grasses (see table below). For control of established perennial weeds, retreatment may be necessary. Vinegar Weed & Grass Killer may be applied up to two days before harvest.

#### TYPICAL WEEDS CONTROLLED

## ANNUAL BROADLEAF WEEDS

Black medic
Chickweed
Black Nightshade
Cinquefoil (rough)
Common groundsel
Hairy nightshade
Lambsquarters
Mustard spp.
Oxalis spp.
Pigweed spp.
Ragweed spp.
Shepherdspurse
Smartweed (Ladysthumb)
Velvetleaf

## PERENNIAL BROADLEAF WEEDS

Amaranth, spp
Cinquefoil (silvery)
Dandelion
Ground ivy
Plantain spp.
Toadflax
Tufted vetch
Wild carrot
Moss

## **ANNUAL GRASSES**

Crabgrass Foxtail spp. Italian ryegrass Poa annua

## PERENNIAL GRASSES

Bluegrass Quackgrass Witchgrass

#### LIVERWORTS\*

\*For Liverworts, dilute this product at a rate of
1 gallon of this product to 2 gallons of water.
1 quart of this product to 2 quarts of water.
For all other weeds, use full strength.

## DO NOT SPRAY DIRECTLY ONTO FOOD CROPS

Use this product to control weeds that surround all food crops, nonfood crops (ornamentals) and non-production agricultural, farmstead, right-of-way, and institutional land sites. Use to control weeds in interstate freeways/highways, federal and state highways and city/county roads and walkways, railroad rights-of-way, tank farms, power stations and easements, and other rights-of way, industrial sites, and vacant lots. Suitable to keep down weeds on all botanical and private association ornamental gardens, kennels, dog runs, and other animal enclosures and walkways.

## **DRIFT MANAGEMENT**

- Drift is the off-site movement of spray away from the intended target. Managing drift is important for the protection of endangered species. In addition, this product is non-selective so it will severely injure or kill any crop plants or other plants it comes in contact with.
- Do not apply this product by aerial application.
- Do not apply when wind conditions favor movement of spray away from the site of application.
- When applying this product in a broadcast application utilize a hooded sprayer, shielded or other spray equipment that prevents the movement of spray away from the target.
- Utilize nozzles that are designed to produce large spray droplets to reduce drift.

EARLY SEASON ANNUAL WEED CONTROL: Apply this product when weeds are small (3 to 5 leaf stage) and actively growing. Spray this product on unwanted weeds (vegetation) to the point of wetness. For best results, spray on dry leaves at temperatures between 50 and 75 degrees Fahrenheit. Conditions of high evaporation rates (temperatures higher than 75 degrees Fahrenheit and low relative humidity) may result in reduced efficacy. Since dilution of this product will reduce effectiveness, do not dilute. Avoid spraying landscape plants, ornamentals and other desirable foliage as this product causes severe injury to desirable plants.

NOTE: ALL CONTACTED VEGETATION WILL BE AFFECTED. DO NOT ALLOW THIS PRODUCT TO COME IN CONTACT WITH DESIRABLE PLANTS. OVERSPRAY OR DRIFT WILL INJURE OR KILL CONTACTED VEGETATION INCLUDING ANY CROP PLANTS.

**Turf and Ornamentals -** Such as but not limited to woody ornamentals, potted crops, foliage plants, greenhouses, shadehouses, and any other plant production structure in which the product can be applied without contacting desirable plants. Applications to weeds in turf will kill surrounding turf.

**Crops** – For all crops listed below, do not broadcast within the growing crop. Apply only with shielded or hooded spray equipment to weeds growing between crop rows. Any contact with the crop will cause crop injury. For all tree crops and fruit crops listed below, spray must be directed under the crop canopy. In crops where cultivation is possible, cultivate crop middles and reduce the sprayed area by directing the application to the uncultivated base of crop plants.

Citrus fruit – such as but not limited to orange, grapefruit, lemon, lime.

Pome fruit – such as but not limited to apple and pear.

Stone fruit – such as but not limited to cherry, peach, nectarine, plum.

Tree nuts – such as but not limited to almond, pecan, pistachio, coconut, betel nut, cashew, walnut. Tropical fruit – such as but not limited to avocado, guava, jujube, noni, mango, star fruit, sugar apple, papaya, lychee, passion fruit, banana, date, olive, tamarind, pineapple.

Berries and small fruit – such as but not limited to strawberry, blackberry, raspberry, blueberry, cranberry, grapes, lingonberry, Saskatoon berry, kiwi fruit, maypop.

Root and tuber vegetables and leaves of root and tuber vegetables – such as but not limited to carrot, potato, radish, sugar beet, turnip tops, garden beet leaves, sugar beet leaves.

Leafy vegetables – such as but not limited to celery, head lettuce, leaf lettuce, spinach.

Brassica vegetables (cole crops) – such as but not limited to broccoli, cauliflower, cabbage, collard, mustard greens.

Fruiting vegetables – such as but not limited to tomato, bell pepper, chili pepper, eggplant, okra.

Cucurbit vegetables – such as but not limited to cucumber, squash, cantaloupe, watermelon.

Bulb vegetables – such as but not limited to onion, green onion, shallots, garlic.

Herbs and spices – such as but not limited to basil, dill, chive, parsley, cilantro, celery seed, dill seed. Legume vegetables and leaves of legume vegetables – such as but not limited to soybeans, peas, beans, guar and their leaves.

Forage crops - grass and non-grass animal feeds – such as but not limited to bermudagrass, fescue, bluegrass, clover, alfalfa.

Cereal grains and their straw or fodder – such as but not limited to corn, rice (except flooded rice), wheat, rye, barley, millet, sorghum, amaranth.

Oilseed crops – such as but not limited to canola, sunflower, flax, rapeseed, mustard, guayule, crambe. Medicinal crops – such as but not limited to echinacea, St. John's wort, ginkgo, valerian, ginseng. Miscellaneous crops – such as but not limited to aloe vera, prickly pear cactus, sugar maple and sweet sorghum for syrup production, peanuts, sugarcane, artichoke, cotton, asparagus, kava-kava, mint, hops, stevia, jojoba, hemp, tobacco, tea, coffee.

Mushrooms – Apply preplant only. Do not apply directly to mushroom beds.

FOR SPOT TREATMENT APPLICATION: Direct spray with a single nozzle or a hand-gun applicator to thoroughly wet undesirable weed foliage. Re-treatment of perennial weed growth may be required for control.

FOR BROADCAST SPRAY APPLICATIONS: For broadcast spray application to control weeds. Application types include pre-plant (prior to crop establishment), preharvest desiccation (to kill crop foliage prior to harvesting the crop) postharvest crop desiccation (remaining crop residues after crop has been harvested).

Use 44 to 88 fluid ounces (1.375 to 2.75 quarts) of this product per 1000 square feet. One gallon will treat approximately 1450 to 2900 square feet.

Use 4.4 to 8.8 fluid ounces of this product per 100 square feet. One quart will treat approximately 360 to 720 square feet.

Thorough coverage is necessary to achieve desirable control. For dense weed populations and/or heavy foliage, use the higher spray volume to ensure adequate coverage. Apply with flat fan nozzles and at sufficient pressure to achieve required coverage, but do not exceed a pressure 35 PSI. When applying this product in a broadcast application within a growing crop, utilize a hooded sprayer, shielded, or other spray equipment that prevents the movement of spray away from the target. For pre-plant burndown of young vegetation, use of wide angle nozzles (110 degrees or wider) spaced close together enable the boom to be positioned lower and closer to the spray target, reducing the potential for drift.

POST- DIRECTED (Row middles, shielded sprayer or hooded sprayer):

For spray application to control weeds, apply 44 to 88 fluid ounces (1.375 to 2.75 quarts) of this product per 1000 square feet. One gallon will treat approximately 1450 to 2900 square feet.

For spray application to control weeds, apply 4.4 to 8.8 fluid ounces of this product per 100 square feet. One quart will treat approximately 360 to 720 square feet.

Thorough coverage is necessary to achieve desirable control. For dense and/or heavy weed populations, use the higher spray volume to ensure adequate coverage. Apply with flat fan nozzles and at the lowest pressure needed to achieve required coverage, but do not exceed 35 PSI. If treating along the side of crop plants, shielded or hooded sprayers must be used to avoid crop injury.

### SPRAY EQUIPMENT:

- Do not apply this product by aerial application.
- Do not apply when wind conditions favor movement of spray away from the site of application.
- When applying this product in a broadcast application utilize a hooded sprayer, shielded, or other spray equipment that prevents the movement of spray away from the target.
- Utilize nozzles that are designed to produce large spray droplets to reduce drift.
- Spray nozzles need to be plastic or 316 stainless steel as this product will eventually corrode any other metal.

FOR CONTROL OF LARGER ANNUALS AND BURNDOWN OF PERENNIAL WEED GROWTH: Larger annual weeds and perennials are more difficult to control and may require retreatment. Treat initially as recommended above and repeat if new growth of leaves appears. Thorough coverage of all weed foliage is necessary to achieve desirable control. To reduce the amount of product required to

control well-established weed stands, mow to a height of 4-6 inches and remove cut vegetation before applying this product.

TIMING OF APPLICATIONS: Best results are achieved from applications to actively growing young weeds. Weeds that are mature, dormant, or hardened due to moisture stress are more tolerant of herbicide treatments. For best results, spray on dry leaves at temperatures between 50 and 75 degrees Fahrenheit. Conditions of high evaporation rates (temperatures higher than 75 degrees Fahrenheit and low relative humidity) may result in reduced efficacy. Only contacted vegetation will be affected.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

#### STORAGE AND DISPOSAL:

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE STORAGE**: Keep from freezing. Store only in original tightly sealed container and out of reach of children.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING:** Nonrefillable container. Do no 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 puncture and dispose of in a sanitary landfill, or by incineration.

**WARRANTY STATEMENT:** To the extent required by law, Energen Carolina, LLC. warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label only when used in accordance with the label directions. Energen Carolina, LLC. makes no other express or implied warranties either of merchantability or fitness for a particular use and shall not be liable for misuse or conditions beyond its control, such as handling or storage.

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