# Frequency herbicide (R)

For preemergence and postemergence weed control in conifer plantations and noncropland areas such as railroad, utility, highway, and pipeline rights-of-way; highway guardrails, delineators, and sign posts; utility substations, petroleum tank farms, pumping installations, farmyards and around farm buildings; fence rows, ACCEPTED storage areas, airports, and nonirrigation ditchbanks

#### **Active Ingredient:**

topramezone: [3-(4,5-dihydro-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1methyl-1*H*-pyrazol-4-vl)methanone

Other Ingredients:

1 gallon contains 2.8 pounds of topramezone free acid.

EPA Reg No. 7969-281

FOR REGISTRATION

June 24, 2014

New York State Department-

of Environmental Conservation

Division of Materials Management

## KEEP OUT OF REACH OF CHILDREN DOC ID: 539133 **CAUTION/PRECAUCIÓN**

Si usted no entiende la etiqueta, busque a alquien 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 inside for First Aid, Precautionary Statements, Directions For Use, and Conditions of Sale and Warranty.

In case of an emergency endangering life or property involving this product. call day or night 1-800-832-HELP (4357).

Product of Switzerland

81085358 NVA 2014-05-325-0142

Produced for:

BASF Corporation, 26 Davis Drive, Research Triangle Park, NC 27709



|                        | FIRST AID   |
|------------------------|---|
| If in eyes             | <ul> <li>Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after first 5 minutes; then continue rinsing eyes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>      |
| If swallowed           | Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor. DO NOT give anything by mouth to an unconscious person. |
| If on skin or clothing | Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.  |
| LIOTI INE NUMBER       |   |

#### HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).

#### **Precautionary Statements**

#### Hazards to Humans and Domestic Animals

**CAUTION.** Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Harmful if swallowed or absorbed through the skin.

#### Personal Protective Equipment (PPE)

Some materials that are chemically resistant to this product are listed below. If you want more options, follow the instructions for **Category A** on an EPA chemical-resistance category selection chart.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves Category A
- Shoes plus socks
- · Goggles, face shield, or safety glasses

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **DO NOT** reuse them. 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.

#### **USER SAFETY RECOMMENDATIONS**

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE 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 Controls Statement**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### **Environmental Hazards**

**DO NOT** apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwater or rinsate. **DO NOT** apply this product through any type of irrigation system.

This product is toxic to aquatic and terrestrial plants. Minimize exposure to nontarget plants. **DO NOT** apply when weather conditions favor drift from tarqet areas.

Product must be used in a manner that will prevent back-siphoning in wells, spills or improper disposal of excess pesticide, spray mixture or rinsate.

#### **Directions For Use**

It is a violation of federal law to use this product in a manner inconsistent with its labeling, **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 agency responsible for pesticide regulation.

#### 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. 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 into treated areas during the restricted-entry interval (REI) of **12 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
- · Chemical-resistant gloves Category A
- · Shoes plus socks

#### NONAGRICULTURAL 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 people or pets to enter the treated area until sprays have dried.

**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.

All applicable directions, restrictions, precautions and **Conditions of Sale** and **Warranty** are to be followed. This labeling must be in the user's possession during application.

#### STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

#### Pesticide Storage

Store product in original container only. Store product in a cool, dry place. **DO NOT** store this product under wet conditions. If this product has been stored where freezing temperatures have occurred, agitate or mix contents of container well before use. Avoid cross-contamination with other pesticides.

#### Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### **Container Handling**

Nonrefillable Container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity ≤ 5 gallons) 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 1/4 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.

Triple rinse containers too large to shake (capacity > 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

(continued)

#### STORAGE AND DISPOSAL (continued)

#### Container Handling (continued)

Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Container. Refill this container with pesticide only. DO NOT reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Triple rinse as follows: To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transport. **DO NOT** transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

#### Spills

In case of large-scale spill of this product, call:

• CHEMTREC 1-800-424-9300

• BASF Corporation 1-800-832-HELP (4357)

### Steps to take if this material is released into the environment or spilled:

- Wear Personal Protective Equipment (PPE) and avoid exposure when managing a spill. (See Precautionary Statements section of this label for required PPE.)
- Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing, and wash affected skin areas with soap and water. Wash clothing before reuse.
- · Keep spill out of all sewers and open bodies of water.

#### Product Information

Frequency® herbicide is a suspension concentrate (SC) broad-spectrum preemergence and systemic postemergence herbicide for control or growth suppression of broadleaf and grass weeds in noncropland areas. When applied as directed, Frequency will control or suppress the broadleaf weeds listed in Table 1. Broadleaf Weeds Controlled and the grass weeds listed in Table 2. Grass Weeds Controlled. Frequency may be used for control of these weeds in bareground, conifer plantations, and selective weeding in areas such as utility, highway, and pipeline rights-of-way, etc. Postemergence applications of Frequency must include spray additives (see Additives section and Mixing Order section of this label).

#### Mode of Action

Frequency is absorbed by leaves, roots, and shoots and translocated to the growing points of sensitive weeds to provide control of emerged weeds. Frequency controls weeds by inhibiting carotenoid biosynthesis (HPPD inhibitor Group 27). Temperatures and moisture conditions for active plant growth are important for optimum Frequency activity. Frequency application to weeds during periods of stress conditions, such as cold temperatures and/or drought, may result in reduced performance.

#### Herbicide Resistance

Repeated applications of a single mode of action in a weed management plan increase the probability of selecting for naturally occurring biotypes' with less susceptibility to herbicides using that mode of action. Therefore, Frequency should be tank mixed with a herbicide having a different mode of action and/or be used in a rotation with herbicides having a different mode of action.

\* A weed biotype is a naturally occurring individual within a given species that has a slightly different but distinct genetic makeup from other plants.

Table 1. Broadleaf Weeds Controlled

| Broadleaf Weeds   | Maximum Size <sup>a</sup> (inches) |  |
|---|------------------------------------|--|
| Amaranth, Palmer<br>Amaranth, Powell                                | 6<br>6                             |  |
| Burcucumber   | 6                                  |  |
| Carpetweed  | 6                                  |  |
| Chickweed, common   | 4                                  |  |
| Cocklebur, common   | 8                                  |  |
| Dandelion   | 6                                  |  |
| Galinsoga, hairy  | 6                                  |  |
| Horseweed (Marestail)   | 6                                  |  |
| Jimsonweed  | 6                                  |  |
| Kochia  | 6                                  |  |
| Lambsquarters, common   | 6                                  |  |
| Mallow, common<br>Mallow, Venice                                    | 3<br>3 <sup>b</sup>                |  |
| Morningglory spp.   | 6b                                 |  |
| Mustard spp.  | 6                                  |  |
| Nightshade, black<br>Nightshade, Eastern black<br>Nightshade, hairy | 6<br>6<br>6                        |  |
| Pigweed, prostrate Pigweed, redroot Pigweed, smooth Pigweed, tumble | 6<br>6<br>6<br>4                   |  |
| Prickly lettuce   | 4                                  |  |
| Ragweed, common<br>Ragweed, giant                                   | 6<br>8                             |  |
| Shepherd's purse  | 4                                  |  |
| Sida, prickly   | 3                                  |  |
| Smartweed, ladysthumb<br>Smartweed, Pennsylvania                    | 3<br>3                             |  |
| Sunflower, volunteer<br>Sunflower, wild (common)                    | 8<br>8                             |  |

Table 1. Broadleaf Weeds Controlled (continued)

| (4 to 16 fl ozs/A) |   |
|--------------------|---|
| Broadleaf Weeds    | <b>Maximum Size</b> <sup>a</sup> (inches) |
| Thistle, Canada    | 6 <sup>b</sup>                            |
| Thistle, Russian   | 4   |
| Velvetleaf         | 8   |
| Waterhemp, common  | 6   |
| Waterhemp, tall    | 6   |
| White clover       | 3   |

<sup>&</sup>lt;sup>a</sup> For best control, apply before weeds reach maximum size.

#### Table 2. Grass Weeds Controlled

| (4 to 16 fl ozs/A)                                  |                                    |                                    |
|---|------------------------------------|------------------------------------|
| Grass Weeds   | Maximum Leaf<br>Stage <sup>1</sup> | Maximum Size <sup>1</sup> (inches) |
| Barnyardgrass                                       | 4                                  | 4                                  |
| Crabgrass, large<br>Crabgrass, smooth               | 4 4                                | 3<br>3                             |
| Cupgrass, woolly                                    | 3                                  | 3                                  |
| Dallisgrass <sup>2</sup>                            | 3                                  | 3                                  |
| Foxtail, giant<br>Foxtail, green<br>Foxtail, yellow | 4<br>3<br>3                        | 4<br>3<br>3                        |
| Goosegrass  | 4                                  | 3                                  |
| Johnsongrass, seedling                              | 3                                  | 4                                  |
| Millet, wild proso                                  | 3                                  | 3                                  |
| Panicum, fall                                       | 3                                  | 3                                  |
| Shattercane   | 3                                  | 4                                  |
| Signalgrass, broadleaf                              | 3                                  | 3                                  |
| Sprangletop   | 3                                  | 3                                  |

<sup>&</sup>lt;sup>1</sup> For best control, apply before weeds reach maximum size or leaf stage.

<sup>&</sup>lt;sup>b</sup> Growth suppression only

<sup>&</sup>lt;sup>2</sup> Growth suppression only

#### **Application Methods and Equipment**

Frequency® herbicide may be applied by either ground or air. Use adequate spray volume to provide accurate and uniform distribution of spray droplets over the treated area and to avoid spray drift to nontarget areas. Adjust equipment to maintain continuous agitation during spraying with good mechanical or bypass agitation. Avoid overlaps that will increase rates above the maximum use rates specified in this label.

**DO NOT** exceed a total of 16 fl ozs per treated acre per year.

The applicator is responsible for any loss or damage that results from spraying **Frequency** in a manner other than that specified in this label. In addition, applicator must follow all applicable state and local regulations and ordinances in regard to spraying.

#### Coverage

For postemergence application, weeds must be thoroughly covered with spray. Dense leaf canopies shelter small weeds and can prevent adequate spray coverage.

For optimal weed control, apply **Frequency** before weeds exceed labeled height.

Postemergence applications of **Frequency** should be applied a minimum of thour before rainfall and require the use of spray additives (see Additives section).

#### **Spray Drift**

**DO NOT** apply when weather conditions may cause drift to adjacent crops and vegetation; injury may result if this occurs. To avoid spray drift from treated areas, **DO NOT** make applications when wind speed exceeds 10 mph or during periods of temperature inversions. Use of larger droplet sizes will reduce spray drift. Agriculturally approved drift-reducing additives may also be used.

#### **Ground Application (Broadcast)**

Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water per acre. Use higher water volumes treating larger weeds and/or high-density weed infestations.

#### **Ground Application (Banding)**

Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water per acre. Use higher water volumes treating larger weeds and/or high-density weed infestations.

For banded application, use the following formulas to calculate the banded herbicide rate and water volume per acre:

| Horbiolao rato aria mator               | · Oidii    | 10 poi doioi                    |   |                                    |
|---|------------|---------------------------------|---|------------------------------------|
| Bandwidth in inches Row width in inches | - х        | Broadcast rate per acre         | = | Banded herbicide rate per acre     |
| Bandwidth in inches Row width in inches | - <b>x</b> | Broadcast<br>volume<br>per acre | = | Banded<br>water volume<br>per acre |

#### **Spot Treatment**

To prepare the spray solutions, thoroughly mix in water 0.25 to 0.5% (0.32 to 0.64 fl oz/gallon water) **Frequency** plus an adjuvant (see **Additives** section). A methylated seed oil at 1% by spray volume is the suggested spray adjuvant. When making spot applications, spray coverage should be sufficient to moisten the leaves of the target vegetation, but not to the point of runoff. See section on desired species.

#### **Aerial Application**

Uniformly apply with properly calibrated aerial equipment in 2 or more gallons of water per acre. Adequate spray volume must be used to provide accurate and uniform distribution of spray particles over the treated area and to avoid drift of spray particles to nontarget areas. To avoid injury to sensitive crops from drift, aerial applicators must adhere to the following special aerial use directions and precautions.

Applicators are required to use a coarse or coarser droplet size (ASABE \$572) or, if specifically using a spinning atomizer nozzle, applicators are required to use a volume mean diameter (VMD) of 385 microns or greater for release heights below 10 feet. Applicators are required to use a very coarse or coarser droplet size or, if specifically using a spinning atomizer nozzle, applicators are required to use a VMD of 475 microns or greater for release heights above 10 feet. Applicators must consider the effects of nozzle orientation and flight speed when determining droplet size.

Nozzles must be pointed toward the rear of the aircraft. The downward angle of the nozzle should not be greater than 20 degrees.

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter to reduce spray drift.

DO NOT apply when wind speed is greater than 10 mph.

#### **Cleaning Spray Equipment**

To avoid injury to sensitive crops, drain and clean application equipment thoroughly using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions. Triple rinse the equipment before and after applying this product.

#### MANAGING OFF-TARGET MOVEMENT

The following information is provided as general guidance for managing offtarget movement. Specific use directions for **Frequency** may differ depending on the application technique used and the vegetation management objective.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-related and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Spray drift from applying this product may result in damage to sensitive plants adjacent to the treatment area. Only apply this product when the potential for drift to these and other adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endandered

species, or nontarget crops) is minimal. **DO NOT** apply when the following conditions exist that increase the likelihood of spray drift from intended targets: high or gusty winds, high temperatures, low humidity, temperature inversions

To minimize spray drift, the applicator should be familiar with and take into account the following drift reduction advisory information. Additional information may be available from state enforcement agencies or the Cooperative Extension on the application of this product.

The best drift management strategy and most effective way to reduce drift potential is to apply large droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see Wind; Temperature and Humidity; and Temperature Inversions).

#### Controlling droplet size:

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure DO NOT exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of Nozzles Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so the spray is released parallel
  to the airstream produces larger droplets than other orientations and is
  recommended practice. Significant deflection from the horizontal will
  reduce droplet size and increase drift potential.
- Nozzle Type Use a nozzle type designed for the intended application.
   With most nozzle types, narrower spray angles produce larger droplets.
   Consider using low-drift nozzles. Solid-stream nozzles oriented straight back produce the largest droplets and the lowest drift. DO NOT use nozzles producing a mist droplet spray.

#### **Application Height**

Making applications at the lowest possible height (aircraft, ground-driven spray boom) that is safe and practical reduces exposure of droplets to evaporation and wind.

#### **Swath Adjustment**

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the upwind and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the application equipment (e.g. aircraft, ground) upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller droplets, etc.).

#### Wind

Drift potential is lowest between wind speeds of 3 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential.

**NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

#### Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

#### **Temperature Inversions**

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud that can move in unpredictable directions due to the light, variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light-to-no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### Wind Erosion

Avoid treating powdery, dry, or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

#### **Additives**

Postemergence application of **Frequency® herbicide** requires the addition of an adjuvant to achieve optimum weed control.

Always use a methylated seed oil (MSO) or a petroleum-based or vegetable seed-based oil concentrate (COC) with **Frequency**. For best performance across a wide range of environmental conditions, including when weeds are under moisture and/or temperature stress, use of an MSO adjuvant is suggested. Apply these oil-based adjuvant concentrates at the rate of 1.0 to 1.5 gallons per 100 gallons of water [1.0% to 1.5% volume-to-volume (v/vi)]. Use the higher rate when making an application during periods of hot, dry weather. A nitrogen-based surfactant blend may be used as an alternative or additive to COC or MSO.

Agriculturally approved drift-reducing additives may be used in applications with **Frequency**.

#### **Mixing Instructions**

Fill the spray tank until it is approximately 1/2 full with clean water. Shake the Frequency® herbicide container well; then slowly add Frequency to the spray tank while agitating. Agitation must be engaged before adding the product to obtain a complete and uniform mixture of Frequency.

Limit the amount of spray mixture prepared to that needed for immediate use.

#### Mixing Order

Use only water as a carrier.

#### Water

- 1. Fill the spray tank 1/2 to 3/4 full with clean water.
- 2. Add the required amount of **Frequency** to the spray tank while agitating.
- After Frequency has visibly dispersed, add spray additives and fill the remainder of the tank with water.

#### **Tank Mix Preparation**

When tank mixing **Frequency** with registered herbicides, add the other herbicides and other components in the following order while agitating:

- 1. Fill spray tank 1/2 to 3/4 full with clean water.
- 2. Add soluble-packet products and thoroughly mix.
- 3. Add Frequency and thoroughly mix.
- Add WP (wettable powder), DG (dispersible granule), DF (dry flowable), or LF (liquid flowable) formulations.
- 5. Add EC (emulsifiable concentrate) products.
- 6. Add spray adjuvants to the spray tank.
- 7. While agitating, fill the remainder of the tank with water.

#### **Tank Mix Information**

Frequency may be used sequentially or tank mixed with other herbicides as part of a complete weed control program. Frequency may be tank mixed only in states where the sequential or tank mix product and application site are registered. Refer to Noncrop Use Directions for more details and for specific tank mix restrictions. Read and follow the applicable restrictions and limitations and Directions For Use on all products included in any tank mix. The most restrictive labeling applies to tank mixes.

#### **Restrictions and Limitations**

- DO NOT apply more than 16 fl ozs Frequency (0.35 lb topramezone) per acre during the year.
- DO NOT apply to areas that can be grazed or cut for hay.

#### **Noncrop Use Directions**

#### Bareground

Frequency can be used as part of a program for nonselective vegetation control to maintain bareground in noncrop areas that must be kept weed free such as railroad, utility, highway, and pipeline rights-of-way; highway guardrails, delineators, and sign posts; utility substations, petroleum tank farms, pumping installations, fence rows, storage areas, farmyards and around farm buildinos and nonirrication ditchbanks.

Frequency offers residual and postemergence control of susceptible annual broadleaf and grass weeds. Adequate moisture is necessary to activate Frequency. Dry weather following application may reduce effectiveness. The actual length of residual control is dependent on factors such as soil type, organic matter, weed pressure, and rainfall amounts after application.

#### **Preemergence Application**

Apply Frequency at 4 to 16 fl ozs/A before weed emergence to control susceptible weeds listed in Table 1 and Table 2. For best performance, tank mix Frequency with other residual herbicides such as Arsenal® PowerLine™ herbicide, Journey® herbicide, Pendulum® AquaCap™ herbicide. Plateau® herbicide. or diuron.

#### **Early Postemergence Application**

For areas where weed emergence has already occurred, apply **Frequency** at 4 to 16 fl ozs/A before weeds reach the maximum size or leaf stage listed in **Table 1** and **Table 2**. Postemergence application of **Frequency** requires the use of an adjuvant to achieve optimum weed control (see **Additives** section). To increase postemergence spectrum, **Frequency** can be tank mixed with **Roundup®** (glyphosate). For best residual effects, tank mix with **Arsenal PowerLine**, **Journey**, **Pendulum AquaCap**, **Plateau**, or diuron (refer to respective labels for appropriate use rates).

#### **Conifer Plantations**

Apply **Frequency** plus the recommended adjuvant (see **Additives** section for details) for the control of undesirable plants during site preparation operations conducted before planting and establishment of conifer plantations and in the year following transplanting.

#### **Site Preparation Application**

Frequency may be applied as a broadcast application or spot treatment during preplant site preparation for the control of undesirable herbaceous broadleaf weed species in plantations at a rate of 4 fl ozs/A in combination with Chopper® Gen2™ herbicide at the specified site preparation rate (see Chopper Gen2 label). Refer to Table 1 and Table 2 for specific weed species controlled.

#### **Herbaceous Weed Control**

Frequency® herbicide may be used for selective weeding in conifer plantations at a rate of 4 fl ozs/A. Apply 4 fl ozs/A of Frequency as a broad-cast treatment, banded over tree rows, or as a directed spray for release of young trees from herbaceous weeds (see species controlled in Table 1 and Table 2) in the year following transplanting. For conifers, tank mix with the herbaceous weed control rate of Arsenal® herbicide or Arsenal® herbicide Applicators Concentrate (see Arsenal or Arsenal herbicide Applicators Concentrate (see Arsenal or Arsenal herbicide Applicators Concentrate label). To prevent the possibility of crop tree injury, DO NOT apply Frequency when trees are under stress from drought, disease, animal or winter injury, planting shock, or other stresses reducing vigor.

#### **Selective Weeding**

Frequency may be used for selective weed control in unimproved and native cool-season grass (such as bluegrass and fescue) and select native warm-season grass (such as little and big bluestem) in highway roadsides, utility rights-of-way, railroad crossings, airports, nonirrigation drainage ditches, and other industrial noncropland sites. Refer to Table 3 for a complete list of tolerant perennial grass species.

For best control, apply as an early postemergence application before weeds reach the maximum size or leaf stage listed in **Table 1** and **Table 2**. Postemergence application of **Frequency** must include spray additives (see **Additives** section).

For increased residual weed control, use the 4 fl ozs/A rate.

- DO NOT apply more than 4 fl ozs/A per application.
- DO NOT apply more than 16 fl ozs/A per year.
- Allow a minimum of 30 days between **Frequency** applications.

**Frequency** may be tank mixed with other registered products such as **Overdrive® herbicide** to broaden the weed control spectrum.

#### **Perennial Grass Tolerance**

Apply **Frequency** during favorable growing conditions for optimum grass tolerance and weed control. Grass under environmental stress is more likely to show injury from any herbicide application. Rarely, plants under these conditions treated with **Frequency** may show transient bleaching of the portion of the leaves intercepting the spray application. These symptoms are temporary and occur infrequently; growth is not affected.

Application of Frequency on Bermudagrass will result in bleaching and severe injury. If treating grass not listed in Table 3. Tolerant Perennial Grass Species, apply on a small area to test grass response and tolerance.

| Table 3. Tolerant Perennial Grasses |                         |  |
|-------------------------------------|-------------------------|--|
| Common Name                         | Scientific Name         |  |
| Big bluestem                        | Andropogon gerardii     |  |
| Centipedegrass                      | Eremochloa ophiuroides  |  |
| Chewings fescue                     | Festuca rubra           |  |
| Creeping red fescue                 | Festuca rubra           |  |
| Eastern gamagrass                   | Tripsacum dactyloides   |  |
| Hard fescue                         | Festuca longifolia      |  |
| Indiangrass                         | Sorghastrum nutans      |  |
| Kentucky bluegrass                  | Poa pratensis           |  |
| Little bluestem                     | Schizachyrium scoparium |  |
| Perennial ryegrass                  | Lolium perenne          |  |
| Tall fescue                         | Festuca arundinacea     |  |

#### **Conditions of Sale and Warranty**

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THE PRODUCT.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

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007969-00281.20131209.**NVA 2013-04-325-0307** Based on: NVA 2012-04-325-0095

Supersedes: NVA 2009-04-325-0255

BASF Corporation 26 Davis Drive Research Triangle Park, NC 27709



#### **NOTES**



| Group | 27 | Herbicide |
|-------|----|-----------|



| For preemergence and postemergence weed control in conifer plantations and noncropland areas such as railroad, utility, highway, and       |
|--|
| pipeline rights-of-way; highway guardrails, delineators, and sign posts; utility substations, petroleum tank farms, pumping installations, |
| farmvards and around farm buildings; fence rows, storage areas, airports, and nonirrigation ditchbanks                                     |

| Active | I | بالمحمدة الم |
|--------|---|--------------|
|        |   |              |

1 gallon contains 2.8 pounds of topramezone free acid.

EPA Reg No. 7969-281

# CAUTION/PRECAUCIÓN

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 attached booklet for complete First Aid, Precautionary Statements, Directions For Use, and Conditions of Sale and Warranty. In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357). FIRST AID: If in eyes: Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes; then continue rinsing eyes. Call a poison control center or doctor for treatment advice. Have a person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor. DO NOT give anything by mouth to an unconscious person. If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice. HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor or going for treatment.

You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357), Precautionary Statements: Hazards to Humans and Domestic Animals CAUTION. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Harmful if swallowed or absorbed through the skin. Environmental Hazards: DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. DO NOT contaminate water when disposing of equipment washwater or rinsate. DO NOT apply this product through any type of irrigation system. This product is toxic to aquatic and terrestrial plants. Minimize exposure to nontarget plants. DO NOT apply when weather conditions favor drift from target areas. Product must be used in a manner that will prevent backsiphoning in wells, spills or improper disposal of excess pesticide, spray mixture or rinsate.

STORAGE AND DISPOSAL: DO NOT contaminate water, food or feed by storage or disposal. Pesticide Storage: Store product in original container only. Store product in a cool, dry place. DO NOT store this product under wet conditions. If this product has been stored where freezing temperatures have occurred, agilate or mix contents of container well before use. Avoid cross-contamination with other pesticides. Pesticide Disposal: Wateste resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or insate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Container Handling: Nonrefillable Container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities. See attached booklet for complete container handling directions including triple insing and pressure rinsing instructions.

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|--|------------------------|
| Produced for: BASF Corporation,                  | Product of Switzerland |
| 26 Davis Drive, Research Triangle Park, NC 27709 |                        |

81085358 NVA 2014-05-325-0142 The Chemical Company

|               | Refillable Container | Nonrefillable Container |
|---------------|----------------------|-------------------------|
| Net Contents: | EPA Est. No.:        |                         |

