

BLASTWAVE 240 EC

HERBICIDE

ACTIVE INGREDIENT:	% BY WT.
Oxyfluorfen*	23.5%
OTHER INGREDIENTS	76.5%
TOTAL	100%

*2-chloro-1-(3-ethoxy-4-nitrophenoxy)4-(trifluoromethyl) benzene

Contains 2.00 pounds active ingredient (a.i.) per gallon

Contains petroleum distillates

KEEP OUT OF REACH OF CHILDREN

WARNING / AVISO

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 front panel for First Aid Instructions and Booklet for complete Precautionary Statements and Directions for Use.

FIRST AID	
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give any liquid to the person. • DO NOT give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with 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 treatment advice.
NOTE TO PHYSICIAN	
Contains petroleum distillate. Vomiting may cause aspiration pneumonia.	
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
In the event of a leak, fire or medical emergency involving a human or animal please call INFOTRAC at 1-800-535-5053 or Outside the USA and Canada at 1-352-323-3500, 24/7/365.	

Manufactured for:
 Longwind Cropsience USA LLC
 8 THE GREEN, STE A, DOVER, Kent, DE, 19901

EPA Reg. No. : 103087-15

EPA Est. No. : 95055-CHN-001

NET CONTENTS: 1 Gal 2.5 Gal
 10 Gal 25 Gal

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS WARNING/AVISO

Causes skin irritation. Harmful if swallowed. Harmful if absorbed through the skin. Causes moderate eye irritation. **DO NOT** get on skin or on clothing. **Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Avoid contact with eyes.** Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Mixers, loaders and applicators using engineering controls (see engineering controls requirements below), must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves (Barrier Laminate, or Viton \geq 14 mils) when mixing and loading
- Chemical-resistant apron when mixing and loading

All other mixers, loaders, applicators and other handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves (Barrier Laminate, or Viton \geq 14 mils)
- Chemical-resistant headgear when exposed overhead
- Chemical-resistant apron when exposed to the concentrate
- Goggles or face shield

PHYSICAL AND CHEMICAL HAZARDS:

Combustible: **DO NOT** use or store near heat or open flame.

DO NOT use with or store near any oxidizing or reducing agents. **DO NOT** mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

USER SAFETY REQUIREMENTS

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/ 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 must:

1. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
2. 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.



ENGINEERING CONTROLS

Mixer and loaders supporting aerial applications to follow land or ground applications to corn, cotton, or soybeans must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], and must:

- Wear the personal protective equipment required above for mixers/loaders using engineering controls, and
- Wear protective eyewear if the system operates under pressure, and
- Applicator must have coveralls, and chemical-resistant footwear immediately available for use in an emergency, including a broken package, spill, or equipment breakdown.

Handlers performing applications to corn must use an enclosed cab that meets the definition in the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, such applicators must:

- Wear the personal protective equipment required above for applicators using engineering controls, and
- Applicator must have coveralls, chemical-resistant gloves, chemical-resistant footwear, and if there is overhead exposure, chemical-resistant headgear immediately available for use in an emergency when they must exit the cab in the treated area, and
- Take off any PPE that was worn in the treated area before reentering the cab, and
- Store all such PPE in a chemical-resistant container, including a plastic bag, to prevent contamination of the inside of the cab.

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)];

When handlers use closed systems or enclosed cabs 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:

This product is toxic to aquatic invertebrates and wildlife. **DO NOT** apply directly to water or areas where surface water is present or to intertidal areas below the mean high-water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. **DO NOT** apply where runoff is likely to occur. **DO NOT** apply where weather conditions favor drift from areas treated. **DO NOT** contaminate water when disposing of equipment wash water or rinsate. See Directions for Use for additional restrictions

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of oxyfluorfen from runoff water and sediment. To reduce runoff of this product **DO NOT** apply when rainfall or irrigation is expected to occur within 48 hours.

NON-TARGET ORGANISM ADVISORY STATEMENT

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

DIRECTIONS FOR USE:

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATION. **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 24 hours, except for the following:

- Onions, garlic and horseradish: The REI is 48 hours.
- Conifer seedlings: The REI is three (3) days.
- Conifer trees: The REI is six (6) days.

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, including plants, soil or water, is:

- Coveralls
- Chemical-resistant gloves made of Barrier Laminate or Viton \geq 14 mils
- Shoes plus socks
- Protective eyewear

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 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 others to enter until sprays have dried.

APPLICATION INSTRUCTIONS AND RESTRICTIONS

BLASTWAVE 240 EC herbicide may be applied for preemergence and postemergence weed control in labeled crops as indicated in this label. All use directions as provided in the Product Use Information section and crop-specific sections of this label, must be followed.

Read and observe all label directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

PRODUCT USE INFORMATION

RESTRICTIONS - THE FOLLOWING USE RESTRICTIONS APPLY TO ALL REGISTERED USES OF THIS PRODUCT: (NOTE: see directions for use for individual crops for crop-specific use Restrictions.)

- The annual maximum application rate for all food/feed crops is 1.5 lbs. ai/Acre.
- **DO NOT** contaminate irrigation water or water used for domestic purposes.
- **DO NOT** use any plants treated with **BLASTWAVE 240 EC** for feed or forage.
- **DO NOT** feed or allow animals to graze on any areas treated with **BLASTWAVE 240 EC**.
- **BLASTWAVE 240 EC** must be applied only by ground application equipment except as otherwise allowed or directed in specific use directions.
- **DO NOT** apply when weather conditions favor drift. Avoid drift to all non-target areas. **BLASTWAVE 240 EC** is phytotoxic to plant foliage.
- **DO NOT** treat ditch banks or waterways with **BLASTWAVE 240 EC**.
- **DO NOT** make over-the-top applications unless specifically allowed in crop-specific use directions.
- **DO NOT** apply in enclosed greenhouses as foliage injury will result.

SPRAY DRIFT BUFFER RESTRICTIONS

- A 24-foot vegetative buffer strip must be maintained between all areas treated with this product and lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds.
- **DO NOT** allow spray to drift from the application site and contact people, structures people may occupy at any time and the associated property, parks and recreation areas, non-target crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.
- The applicator also must use all other measures necessary to control drift.
- Refer to the "Mandatory Spray Drift Requirements" and "Spray Drift Advisories" sections of this label for further information.

MANDATORY SPRAY DRIFT DIRECTIONS

AERIAL APPLICATIONS:

- **DO NOT** release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a coarse or coarser droplet size (ASABE S572.1)
- The boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.
- Applicators must use $\frac{1}{2}$ swath displacement upwind at the downwind edge of the field.
- When wind speeds are 5 – 10 mph maintain a minimum downwind buffer zone of at least $\frac{1}{2}$ mile from all crops and desirable vegetation, except the following:
 - o 150 feet from dormant tree fruit/nut/vine crops and overwintering sugar beets.
 - o 650 feet from garlic, jojoba, legumes, onions, pastures, small grains, seedling sugar beets, and non-targeted vegetable fallow beds.
- For upwind and side borders, maintain buffer zone of 150 feet from any non-targeted vegetable fallow bed, crop, or desirable vegetation.

GROUND BOOM APPLICATIONS:

- Apply with the nozzle height specified by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- For all applications, applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

BOOM-LESS GROUND APPLICATIONS:

- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

CONTROLLING DROPLET SIZE – GROUND BOOM

- **Volume:** Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure:** Use the lowest spray pressure specified for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle:** Use a spray nozzle that is designed for the intended application. Use nozzles designed to reduce drift.

CONTROLLING DROPLET SIZE: AIRCRAFT

- **Adjust Nozzles:** Follow nozzle manufacturer's directions for setting up nozzles. To reduce fine droplets, orient nozzles parallel with the airflow in flight.

BOOM HEIGHT: Ground Boom

- Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, keep the boom level with the crop and have minimal bounce.

RELEASE HEIGHT: Aircraft

- Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS:

- Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY:

- When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS:

- Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

WIND:

- Drift potential generally increases with wind speed. **AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.** Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

IMPORTANT: TREATED SOIL MUST BE THOROUGHLY INCORPORATED TO A DEPTH OF 4 INCHES AFTER HARVEST (OR ABANDONING) OF THE TREATED CROP BUT PRIOR TO PLANTING OF THE ROTATIONAL CROP. FAILURE TO ACHIEVE THIS THOROUGH AND COMPLETE INCORPORATION OR TO FOLLOW THE REQUIRED MINIMUM PLANT-BACK INTERVAL MAY RESULT IN CROP INJURY, STAND REDUCTION AND/OR VIGOR REDUCTION OF THE PLANT-BACK CROP. See specific fallow bed labeling regarding crop planting information for applicators of **BLASTWAVE 240 EC** that are made to a fallow bed or fallow field.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, Oxyfluorfen is a Group 14 herbicide that inhibits protoporphyrinogen oxidase (PPO). Any weed population may contain or develop plants naturally resistant to oxyfluorfen and other Group 14 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of **BLASTWAVE 240 EC** or other Group 14 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in the field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Fields should be scouted prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective.
- Fields should be scouted after application to verify that the treatment was effective.

- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include:
 - (1) Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
 - (2) A spreading patch of non-controlled plants of a particular weed species;
 - (3) Surviving plants mixed with controlled individuals of the same species.
 If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method including hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Longwind Cropsience at +86-21-64881723.

Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of actions for each target weed.

Best Management Practices for Resistance Management

Plant into weed-free fields and keep fields as weed-free as possible.

To the extent possible, use a diversified approach toward weed management. Whenever possible incorporate multiple weed-control practices such as mechanical cultivation, biological management practices, and crop rotation.

Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.

To the extent possible **DO NOT** allow weed escapes to produce seeds, roots or tubers. Manage weed seeds at harvest and post-harvest to prevent a buildup of the weed seed bank

Apply this herbicide at the correct timing and rate needed to control the most difficult weed in the field.
If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use non-chemical methods to remove escapes.

WEEDS LISTED

AGERATUM
 AMARANTH SPINY
 BALSAMAPPLE
 BARNYARD GRASS (WATERGRASS)+
 BEDSTRAW CATCHWEED
 BITTERCRESS/LESSER
 BLUEGRASS (ANNUAL)+
 BUCKWHEAT WILD
 BURCLOVER
 BUTTERCUP SMALLFLOWER
 BUTTONWEED
 CAMPHORWEED
 CANARYGRASS/ANNUAL
 CARPETWEED
 CHEESEWEED (MALVA)
 CLOVER, RED+
 CLOVER, WHITE+
 COCKLEBUR, COMMON
 CRABGRASS, LARGE (HAIRY)
 CROTALARIA

Ageratum conyzoides
 Amaranthus spinosus
 Momorica charantia
 Echinonola crus-galli
 Galium aparine
 Cardamine oligosperma
 Poa annua
 Polygonum convolvulus
 Medicago hispida
 Ranunculus aborvitus
 Borreria laevis
 Heterotheca subaxillaris
 Phalaris canariensis
 Mollugo verticillate
 Malva parviflora
 Trifolium pratense
 Trifolium repens
 Xanthium pensylvanicum
 Digitaria sanguinalis
 Crotalaria species



CROTON, TROPIC
CUDWEED, NARROWLEAF
EVENINGPRIMROSE, CUTLEAF
FIDDLENECK, COAST+
FILAREE, BROADLEAF
FILAREE, REDSTEM
FILAREE, WHITESTEM
FIREWEED (FROM SEED)
FLIXWEED
FOXTAIL, GIANT+
FOXTAIL, GREEN
FOXTAIL, YELLOW
GERANIUM, CAROLINA
GOOSEGRASS+
GROUNDCHERRY, CUTLEAF
GROUNDCHERRY, WRIGHT
GROUNDSEED, COMMON
HENBIT
HORSEWEED (MARESTAIL)
JIMSONWEED
JOHNSONGRASS, SEEDLING
KNOTWEED, PROSTRATE
LADYSTHUMB (SMARTWEED)
LAMBSQUARTERS, COMMON
LETTUCE, PRICKLY (CHINA LETTUCE)
MALLOW, LITTLE (MALVA)
MAYWEED (DOG FENNEL)
MINERSLETTUCE
MORNINGGLORY SPECIES, ANNUAL
MORNINGGLORY, IVYLEAF+
MORNINGGLORY, TALL+
MUSTARD, BLACK
MUSTARD, BLUE (PURPLE MUSTARD)
MUSTARD, COMMON YELLOW
MUSTARD, HEDGE
MUSTARD, TUMBLE (JIM HILL MUSTARD)
MUSTARD, WILD
NETTLE, BURNING
NIGHTSHADE, AMERICAN BLACK
NIGHTSHADE, BLACK
NIGHTSHADE, HAIRY
OATS, WILD
ORACH, RED
OXALIS (BERMUDA BUTTERCUP)
PANICUM, FALL
PEPPERWEED, VIRGINIA
PEPPERWEED, YELLOWFLOWER
PIGWEEED, PROSTRATE
PIGWEEED, REDROOT
PIMPERNEL, SCARLET
POINSETTIA, WILD
POINSETTIA, WILD
PURSLANE, COMMON
PUSLEY, FLORIDA
RAGWEED, COMMON
REDMAIDS
ROCKET, LONDON
RYEGRASS, ITALIAN

Croton glandulosus
Gnaphalium falcatum
Oenothera laciniata
Amsinckia intermedia
Erodium botrys
Erodium cicutarium
Erodium moschatum
Epilobium angustifolium
Descurainia sophia
Setaria faberi
Setaria viridis
Setaria lutescens
Geranium carolinianum
Eleusine ndica
Physalis angulata
Physalis wrightii
Senecio vulgaris
Lamium amplexicaule
Conyza canadensis
Datura stramonium
Sorghum halepense
Polygonum hualepense
Polygonum aviculare
Polygonum persicaria
Chenopodium album
Lactuca scariola
Malva parviflora
Anthemis cotula
Montia perfoliata
Ipomoea species
Ipomoea hederacea
Ipomoea purpurea
Brassica nigra
Chorispora tenella
Brassica campestris
Sisymbrium officinale
Sisymbrium altissimum
Brassica kaber
Urtica urens
Solanum americanum
Solanum nigrum
Solanum sarrachoides
Avena fatua
Atriplex rosea
Oxalis pes-caprae
Panicum dichotomiflorum
Lepidium virginicum
Lepidium perfoliatum
Amaranthus bitoides
Amaranthus retroflexus
Anagallis arvensis
Euphorbia heterophylla
Tribulus terrestris
Portulaca oleracea
Richardia scarbra
Ambrosia artemisiifolia
Calandrinia caulescens
Sisymbrium irio
Lolium multiflorum

SAGE, LANCELEAF
SANDBUR, FIELD
SANDSPURRY, RED
SESBANIA, HEMP
SHEPHERDSPURSE+
SICKLEPOD
SIDA, PRICKLY (TEAWEED)
SIGNALGRASS, BROADLEAF
SMARTWEED, PENNSYLVANIA
SORREL, RED (FROM SEED)
SOWTHISTLE, ANNUAL
SPEEDWELL, BIRDSEYE
SPURGE, GARDEN
SPURGE, PROSTRATE++
SPURGE, SPOTTED++
SPURRY, CORN
TANSYMUSTARD
THISTLE, BULL++
THISTLE, RUSSIAN
VELVETLEAF
WITCHGRASS
WITCHWEED
WOODSORREL, COMMON YELLOW

Salvia reflexa
Cenchrus incertus
Spergularia rubra
Sesbania exaltata
Capsella bursa-pastoris
Cassia obtusifolia
Sida spinosa
Brachiaria platyphylla
Polygonum pensylvanicum
Rumex acetosella
Sonchus oleraceus
Veronica persica
Euphorbia hirta
Euphorbia supina
Euphorbia maculata
Spergula arvensis
Descurainia pinnata
Cirsium vulgare
Salsola kali
Abutilon theophrasti
Panicum capillare
Striga asiatica
Oxalis stricta

+ Highest rate and/or multiple applications may be required for acceptable control.

++Preemergence control only.

APPLICATION METHODS AND CULTURAL PRACTICES

PREEMERGENCE WEED CONTROL

Apply the specified rate in a broadcast spray volume of 15 or more gallons of water per acre using calibrated spray equipment capable of uniform application to the soil surface. Seeding weeds are controlled as they come in contact with the soil-applied herbicide during emergence. Preemergence weed control is most effective when **BLASTWAVE 240 EC** is applied to soil surfaces that are clean (free of crop or weed residues or clippings) and weed-free. Prior to application, weed or crop residues must be removed by thorough incorporation into the soil using tillage equipment or by blowing the area to be treated. At least 0.25 inch of irrigation or rainfall is required to activate **BLASTWAVE 240 EC** and must occur within 3 to 4 weeks after application. For optimum results, **BLASTWAVE 240 EC** must be applied to prepared beds or soil surfaces that will be left undisturbed during the time period for which weed control is desired. Cultural practices that disturb or redistribute surface soil following treatment with **BLASTWAVE 240 EC** including cutting water furrows will reduce weed control effectiveness.

Application Rates and Rate Ranges: Where rate ranges are given, use the lower rate in the rate range on coarse texture soils with less than 1% organic matter and lighter weed infestations. Use higher rates in the rate range on medium to fine texture soils, soils containing greater than 1% organic matter, heavy weed infestations, or for extended residual preemergence weed control.

POSTEMERGENCE WEED CONTROL

Apply the specified rate in a broadcast spray volume of 20 or more gallons of water per acre (a minimum 10 gallons if applying **BLASTWAVE 240 EC** in tank mix with glyphosate). Because **BLASTWAVE 240 EC** is a contact herbicide, complete and uniform coverage of weed foliage is essential for optimum postemergence control. Increase the spray volume to ensure complete and uniform coverage as weed height and density increases or in the presence of heavy trash (weed or crop residue). Postemergence applications of **BLASTWAVE 240 EC** are most effective when made to weeds at the seedling stage. Applications made later than the 4-inch or 4 leaf stage may result in partial control or suppression. Postemergence applications must be made to seedling grasses not exceeding the 2-leaf stage. The addition of 0.25% v/v (2 pints per 100 gallons of spray) of an 80% active nonionic surfactant, labeled for application to growing crops, will enhance herbicidal effectiveness in controlling emerged weeds.

Postemergence Application Rates: Where a rate range is given, use a higher rate in the rate range for heavy weed infestations, weeds in advanced stages of growth or for extended residual preemergence weed control following control of existing emerged weeds.

GROUND APPLICATION

Ground Broadcast: Apply **BLASTWAVE 240 EC** using conventional low-pressure ground spray equipment with flat fan nozzles. Follow manufacturer's requirements for spraying pressure and boom height. An off-center (OC) nozzle positioned at the end of the boom may be desired. Check calibration of spray equipment before each use.

Directed Sprays: Apply **BLASTWAVE 240 EC** as a low-pressure spray in a spray volume of 20 or more gallons of spray per acre (broadcast basis). Follow manufacturer's requirements for nozzle spacing and operating pressure. Direct spray toward the soil at the base of the crop. In row crops, use a minimum of 2 flat fan nozzles per row (one on each side) and for optimum spray coverage use 4 flat fan nozzles per row (two on each side). Point the two forward nozzles forward and downward while the rear nozzles point to the rear and downward. With either sprayer system, adjust nozzles to cover the weed foliage but minimize contact with the crop. **DO NOT** apply with hollow cone nozzles.

IMPORTANT: BLASTWAVE 240 EC is a contact herbicide. Contact of sprays or drift with foliage or green stems can cause severe crop injury. Use directed sprays and spray shields and/or leaf lifters as necessary to minimize contact of spray or drift with crop foliage or stems. Young green stems of woody plants are also susceptible to injury from spray contact. Potential for injury to woody stems diminishes with loss of green color and the development of relatively impervious non-living corky tissue (bark) on the surface of the stem.

Band Application: Application rates listed in this label are for broadcast application. For band application the rate per broadcast acre must be reduced according to the following formula:

$$\frac{\text{Band Width (in inches)}}{\text{Row Width (in inches)}} \times \text{Rate per Broadcast Acre} = \text{Amount Needed per Acre for Banded Application}$$

SPOT APPLICATION

For spot application, apply sprays uniformly to soil for preemergence weed control or on a spray-to-wet basis for postemergence weed control. Mix the required amount of **BLASTWAVE 240 EC** with the specified amount of water. For preemergence weed control, use one-half to one gallon of spray per 1000 sq ft. for postemergence weed control use a minimum of 1 gallon of spray per 1000 sq ft and add an 80% active nonionic surfactant at the rate of 0.5 fl oz (1 Tbs) per gallon of spray. If making spot applications within an established crop, use low-pressure sprays and direct the spray to the soil beneath the plants. To avoid crop injury, **DO NOT** allow sprays to contact leaves and stems of herbaceous plants or leaves or green stems of woody plants.

Amount of BLASTWAVE 240 EC Required to Treat 1000 sq ft at Specified Application Rate					
0.5 pint/acre (0.125 lbs. a.i.)	1.0 pint/acre (0.25 lbs. a.i.)	2.0 pint/acre (0.5 lbs. a.i.)	3.0 pint/acre (0.75 lbs. a.i.)	4.0 pint/acre (1.0 lbs. a.i.)	6.0 pint/acre (2.0 lbs. a.i.)
0.2 fl oz (5.5 ml)	0.4 fl oz (11 ml)	0.75 fl oz (22 ml)	1.1 fl oz (33 ml)	1.5 fl oz (44 ml)	3.0 fl oz (88 ml)

1 pint = 16 fl oz; 1 fl oz = 29.6 (30) ml

AERIAL APPLICATION

Use aerial boom equipment designed for use with herbicides and a minimum spray volume of 10 gallons per acre (5 gallons per acre if tank mixed with glyphosate). **DO NOT** aerially apply **BLASTWAVE 240 EC** unless crop-specific use directions specifically allow and provide directions for aerial application.

AVOID DRIFT: Exercise extreme care to void herbicide contact with any desirable dormant or non-dormant crop, plant, tree or vegetation as severe injury may result. Extreme care must be exercised to prevent spray drift that could result in damage to other crops or desirable vegetation. Adhere to the following guidelines when aerial applications are to be made.

CHEMIGATION

DO NOT apply this product through any irrigation system unless the instructions for chemigation are followed. If application by chemigation is not specifically listed under the specific crop use instructions, **BLASTWAVE 240 EC** herbicide may not be applied to that crop through an irrigation system.

Apply this product only through sprinkler (center pivot, solid set, portable lateral, or low-volume (micro sprinkler), drip (trickle), or flood (basin) irrigation systems. Refer to use directions for specific crops for instructions as to which type of irrigation system may be used. **DO NOT** apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you need to contact State Extension Service specialists, equipment manufacturers, or other experts.

DO NOT connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments if the need arise.

SPRINKLER CHEMIGATION (FOLIAR SPRAY USES)

For sprinkler irrigation, sufficient water must be applied at the beginning of the irrigation period to ensure uniform wetting of the plant and/or soil surfaces. Meter **BLASTWAVE 240 EC** at a continuous uniform rate during the middle 1/3 of the irrigation period to allow for uniform distribution to the vegetation and/or soil surface. Continue irrigation during the final 1/3 of the irrigation period to ensure proper flushing of the irrigation system. During sprinkler irrigation, sufficient water must be applied to ensure water penetration to a depth of two inches.

AVOID DRIFT: Extreme care must be exercised to prevent spray drift that could result in damage to other crops or desirable vegetation. Use the following guidelines when applications of **BLASTWAVE 240 EC** are made through sprinkler irrigation:

- **DO NOT** apply when the wind direction is not stable, when inversion conditions exist, or when wind velocity exceeds 10 mph.
- When wind speeds are 5 mph or less, maintain a minimum downwind buffer zone of at least 1/2 mile from all crops and desirable vegetation, except for the following:
- Maintain a minimum downwind buffer of:
 - o 150 feet from dormant tree fruit, dormant vines and overwintering sugar beets.
 - o 650 feet from garlic, jojoba, legumes, onions, pastures, small grains, seeding sugar beets and vegetable fallow beds.
 - o When wind speeds are between 5 and 10 mph, downwind buffer zones in excess of those listed above are suggested.
 - o For upwind and side borders, maintain a minimum buffer zone of 150 feet from any vegetable fallow bed, crop, or desirable vegetation.

To apply a pesticide using sprinkler chemigation, the chemigation system must meet the following specifications:

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, including a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

FLOOD (BASIN) CHEMIGATION (SOIL DRENCH USES)

BLASTWAVE 240 EC must be continuously metered into the water during the entire irrigation period. Agitation in the pesticide supply tank is suggested. Best weed control results from **BLASTWAVE 240 EC** applied through flood (basin) irrigation systems are obtained when a uniform distribution and flow of irrigation water is maintained over level land.

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity including drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, including a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

DRIP (TRICKLE) CHEMIGATION (SOIL DRENCH USES)

Meter **BLASTWAVE 240 EC** at a continuous uniform rate during the middle 1/3 of the irrigation period to allow for uniform distribution to the soil surface. For best results, **BLASTWAVE 240 EC** must be uniformly positioned across the wetted area to help reduce the "ring effect" of weed escapes, as other products begin to break down around the emitter. Continue irrigation during the final 1/3 of the irrigation period to ensure proper flushing of the irrigation system.

To apply a pesticide using drip (trickle) chemigation, the chemigation system must meet the following specifications:

- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pipe and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump including a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

CHEMIGATION CALIBRATION: FOR LOW-VOLUME SPRINKLERS (MICROSPRINKLERS) AND DRIP (TRICKLE) IRRIGATION SYSTEMS

Calculation of use rate is based on wetted area around emitters - NOT on grove acres. To determine correct amount of **BLASTWAVE 240 EC**, use the following formula:

1. Treated area per each emitter = AA = $3.14 \times (\text{radius} \times \text{radius})$

Example: If the average distance from emitter to perimeter of wetted area measured at the soil surface is 13 inches, then

$$A = 3.14 \times (13'' \times 13'')$$

$$A = 3.14 \times (169)$$

$$A = 530.7 \text{ square inches}$$

2. The area wetted in each acre (converted to square feet) = B

$$B = \frac{A \times \text{emitters/acre}}{144}$$

Example: If there are 300 emitters per acre, then

$$B = \frac{530.7 \times 300}{144} = B = 1105.6 \text{ square feet wetted per acre}$$

3. The total area (in square feet) wet by your system = C
C = B X acres covered by system

Example: If the system covers 20 acres, then

$$C = 1105.6 \text{ square feet per acre} \times 20 \text{ acres}$$

C = 22,112 square feet wetted by system

4. Amount of **BLASTWAVE 240 EC** to inject = S
Rate per treated acre of **BLASTWAVE 240 EC** = R

$$S = \frac{C \times R}{43,560} = \text{quarts of BLASTWAVE 240 EC}$$

(1 acre = 43,560 square feet)

Example: If the desired application rate per treated acre is 1 quart of **BLASTWAVE 240 EC**, then $S = \frac{22,112 \times 1.0}{43,560} = S = 0.507$ quarts of **BLASTWAVE 240**

EC must be injected into system.

NOTE: Select the proper rate based on weed spectrum and desired length of control (See RATE RANGES section below).

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

If the chemigation system is connected to a public water supply, the following conditions must also be met:

- Public water systems means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from a point of pesticide introduction. As an option to the RPZ, the water from the public water system must be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shutdown.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, including a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

CULTURAL CONSIDERATIONS

In order for **BLASTWAVE 240 EC** to provide maximum preemergence activity:

Prior to application, the bed or soil surface must be smooth and free of crop and weed trash (decaying leaves, clippings, dead weeds, etc.). Leaves and trash may be removed by blowing the area to be treated or by thoroughly mixing the trash into the soil through cultivation prior to herbicide application. After application, at least one-quarter inch (1/4 inch) of irrigation or rainfall must occur within 3 or 4 weeks after application. The best results from **BLASTWAVE 240 EC** are from applications to established beds or soil surfaces that are left undisturbed during the time period for which weed control is desired. Cultural practices that result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of **BLASTWAVE 240 EC**. Cutting water furrows or cultivations that mix untreated soil into treated areas will also reduce the effectiveness of the treatment.

RATE RANGES

Select proper application rates based on soil conditions, weed spectrum and desired period of residual weed control.

Preemergence Application: Where rate ranges are given, use the lower rate in the rate range on coarse texture soils with less than 1% organic matter. Use higher rates in the rate range on medium to fine texture soils, soils containing greater than 1% organic matter, or where a longer period of residual weed control is desired.

Postemergence Application: Where a rate range is given, use higher rate in rate range for heavy weed infestations, weeds in advanced stages of growth or where a longer period of residual weed control is desired.

MIXING DIRECTIONS

Shake Well Before Using. Fill the spray tank at least one-third full of clean water. With the pump and agitator running, add the specified amount of herbicides to the spray tank. The order of addition to the spray tank must be (1) wettable powders, (2) flowables and (3) soluble liquids. Complete filling of the spray tank with water.

Use of Surfactants: For all applications of **BLASTWAVE 240 EC** (except garlic and onions) where postemergence weed control is desired, add 2 to 4 pints of Latron AG-98 nonionic surfactant (or comparable 80% active nonionic surfactant approved for application to growing crops) per each 100 gallons of spray. The addition of 4 pints of Latron AG-98 per 100 gallons of spray is specified to enhance postemergence activity when hard water (greater than 600 ppm) is used as carrier. Maintain agitation until spraying is completed.

Tank Mixing Precautions:

- Read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply.
- **DO NOT** exceed specified application rates. **DO NOT** tank mix with another pesticide product that contains the same active ingredient as the product unless the label of either tank mix partner specifies the maximum dosages that may be used. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank Mix Compatibility Testing: A jar test is advised prior to tank mixing to ensure compatibility of this product and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour; if the mixture balls-up, forms flakes, sludges, gels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination must not be used.

Sprayer Cleanup: Thoroughly flush spray equipment (tank, pump, hoses and boom) with clean water before and after each use. Residues of **BLASTWAVE 240 EC** remaining in spray equipment may damage other crops. The addition of a non-ionic surfactant to equipment flushing waters at the rate of 1 quart per 100 gallons is required to aid in removal of residues of **BLASTWAVE 240 EC**.

CROP-SPECIFIC USE INFORMATION

ARTICHOKE (GLOBE) Post-Directed Spray Application

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	4 – 6 (1.0 - 1.5 lbs a.i.)	Application Method: Apply as a directed spray to the soil surface between the rows and at the base of artichoke plants in a minimum spray volume of 40 gallons per acre. Timing to Crop: Apply after completion of ditching operations. Separate applications of up to 4 pint/acre (1.0 lbs. a.i.) may be made 8 to 10 weeks apart or a single application of up to 6 pint/acre (1.5 lbs. a.i.) may be made. Timing to Weeds: Preemergence up to 8 leaf stage.

Restrictions:

- Application of **BLASTWAVE 240 EC** to artichoke plantings must be delayed a minimum of 60 days after cutting back or transplanting.
- **DO NOT** apply more than 6 pints (1.5 lbs. a.i.) of **BLASTWAVE 240 EC** per acre per year as a result of a single application or multiple applications.
- **DO NOT** apply more than 6 pints (1.5 lbs. a.i.) in a single application.
- **DO NOT** make more than 2 applications per year when using reduced application rates.
- **DO NOT** make second application within 8 weeks of first.
- **DO NOT** apply over-the-top. Contact with direct spray or drift will cause injury to artichoke fronds or severe injury to buds or flowers.
- Preharvest Interval: **DO NOT** apply within 5 days of harvest.

Key Weeds Controlled:

Preemergence	Postemergence
cheeseweed (malva) groundsel, common lambsquarier, common mustard, common yellow oxalis (Bermuda buttercup) [†] shepherdspurse sowthistle, annual	cheeseweed (malva) groundsel, common mustard, common yellow nettle, burning oxalis (Bermuda buttercup) [†] shepherdspurse sowthistle, annual

[†] Suppression

BLACKBERRY AND RASPBERRY PRIMOCANE SUPPRESSION

For Use only in Oregon and Washington

Crop	Rate (Pint/acre) [†]	Specific Use Directions
Blackberry	1.6 – 3.2 (0.4 - 0.8 lbs a.i.)	Apply BLASTWAVE 240 EC in a minimum spray volume of 50 gallons per broadcast acre to primocanes which have emerged 4 to 6 inches. Proper timing of the spray application is essential. Application to primocanes greater than 6 inches may result in unacceptable cane growth (bent canes).
Raspberry	0.75 – 3.0 (0.187 – 0.375 lbs. a.i.)	<p>The highest use rate and/or additional applications may be required to achieve acceptable suppression of vigorous early season primocane growth. On shorter season plantings (in higher elevations) or plantings grown on light (sandy) textured soils, reduced rates may provide acceptable primocane suppression. Primocane suppression from BLASTWAVE 240 EC may last from 3 to 6 weeks, therefore, timing, rate, and number of applications must be adjusted according to plant health and vigor and the desired length of primocane suppression.</p> <p>The addition of 2 pints of an 80% active nonionic surfactant approved for application to growing crops) per 100 gallons of spray solution is advised.</p>

(continued)

Precautions:

- Occasionally, after the use of **BLASTWAVE 240 EC**, a spotting, crinkling or flecking may appear on the leaves of the fruiting canes. Some blackberry varieties may be more sensitive than others. This is to be expected and does not affect performance or yield. Leaves of the fruiting canes, which receive direct or indirect (drift) spray contact will be injured.

Crop-Specific Restrictions:

- **DO NOT** use **BLASTWAVE 240 EC** on blackberry plantings which are weak or under stress, due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture, as primocane growth may be insufficient for the following year's crop.
- **Chemigation: DO NOT** apply this product through any type of irrigation system.
- **BLASTWAVE 240 EC** must be applied only by ground application equipment.
- **BLASTWAVE 240 EC** is phytotoxic to plant foliage. Avoid accidental spray contact or drift with established crops.
- **DO NOT** apply when weather conditions favor drift to non-target areas.
- **DO NOT** treat ditch banks or waterways with **BLASTWAVE 240 EC** or contaminate water used for irrigation or domestic purposes.
- **DO NOT** make follow up applications within 8 weeks of previous application when using reduced application rates.

Blackberry

- **DO NOT** apply more than 3.2 pints (0.8 lb. a.i.) broadcast per acre of **BLASTWAVE 240 EC** in a single application.
- **DO NOT** apply more than a total of 6 pints (1.5 lbs. a.i.) broadcast per acre per year.
- **DO NOT** apply more than four (4) applications per year when using reduced application rates.
- **DO NOT** apply **BLASTWAVE 240 EC** within 15 days of harvest.

Raspberry

- **DO NOT** apply more than 3 pints (0.75 lb. a.i.) broadcast per acre of **BLASTWAVE 240 EC** in a single application.
- **DO NOT** apply more than a total of 5 pints (1.25 lbs. a.i.) broadcast per acre per year.
- **DO NOT** apply more than two (2) applications per year when using reduced application rates.
- **DO NOT** apply **BLASTWAVE 240 EC** within 50 days of harvest.

† Dosages listed are for broadcast application. See Ground Application section of this label for conversion to band application rates.

BLACKBERRY PRIMOCANE SUPPRESSION
 During Nonbearing Year of Alternate Year Blackberry Production
 For Use Only in Oregon

Crop	Rate (Pint/acre) [†]	Specific Use Directions
Blackberry	2 – 4 (0.25 – 0.5 lbs. a.i.)	<p>Apply BLASTWAVE 240 EC to the unwanted vegetative growth at the base of the blackberry plants. The addition of 2 pints of an 80% active nonionic surfactant approved for application to growing crops) per 100 gallons of spray solution is advised.</p> <p>BLASTWAVE 240 EC must be applied after a sufficient number of canes have been bundled and trained to the trellis wire. The first application is made when the primocanes to be saved have reached either the bottom wire or approximately 4 feet in length (typically early to mid-June). BLASTWAVE 240 EC must be directed to the lower portion of the canes to reduce unwanted lateral growth and excessive foliage that normally develops at the base of each plant. The primocanes to be saved must be trained at an adequate height above the directed spray. A second application (typically mid-July to mid-September after the primocanes are trellised and wrapped on wire) may be applied to suppress new growth, leaves and lateral spurs that develop at the base of the plant. Application timing will vary according to location and vigor of planting.</p> <p>Spray coverage is essential for optimum activity on unwanted vegetation. BLASTWAVE 240 EC must be applied at a minimum of 30 gallons of water per broadcast acre in a 3-foot band directed towards the lower portion of the blackberry canes in the primocane row. Use a low-pressure spray system (suggested 30 to 60 psi). Mounted nozzles are to be used to deliver the spray solution. Spray equipment must be calibrated carefully before each use.</p>
<p>Precautions:</p> <ul style="list-style-type: none"> Occasionally, after the use of BLASTWAVE 240 EC, a spotting, crinkling or flecking may appear on the leaves of the fruiting canes. Some blackberry varieties may be more sensitive than others. This is to be expected and does not affect performance or yield. Leaves of the fruiting canes, which receive direct or indirect (drift) spray contact will be injured. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> DO NOT use BLASTWAVE 240 EC on blackberry plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture. Chemigation: DO NOT apply this product through any type of irrigation system. BLASTWAVE 240 EC must be applied only by ground application equipment. BLASTWAVE 240 EC is phytotoxic to plant foliage. Avoid accidental spray contact or drift with established crops. DO NOT apply when weather conditions favor drift to non-target areas. DO NOT apply more than 4 pints (1.0 lb. a.i.) of BLASTWAVE 240 EC broadcast per acre in a single application. DO NOT apply more than 8 pints (2.0 lbs. a.i.) broadcast per acre per year. DO NOT apply more than two applications per year when using reduced application rates. DO NOT make follow up application within 8 weeks of previous application. 		

(continued)

Crop-Specific Restrictions

- For application only during the nonbearing year of blackberries grown using Alternate Year (AY) management system.
 - **DO NOT** apply **BLASTWAVE 240 EC** to blackberries during the bearing season.
 - In all states except Northeastern states, **DO NOT** apply until direct seeded garlic plants have two (2) fully developed true leaves. In the Northeastern states, **DO NOT** apply until direct seeded garlic plants have three (3) fully developed true leaves. Application made prior to the specified growth stage may result in serious crop injury.
 - **DO NOT** apply **BLASTWAVE 240 EC** within 60 days of harvest.
- † Dosages listed are for broadcast application. See Ground Application section of this label for conversion to band application rates.

BROCCOLI / CABBAGE / CAULIFLOWER

Pre-Transplant (Preplant) Application for Preemergence Broadleaf Weed Control

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	1 – 2 (0.25 -0.5 lbs. a.i.)	Pre-Transplant Application Only: Apply broadcast to final seedbed prior to transplanting. Use lower rate in the rate range on coarse textured soils with less than 1% organic matter. Use the highest rate in the rate range on medium to fine textured soils or soils containing greater than 1% organic matter. Transplanting must be accomplished with minimal soil disturbance and soil left undisturbed during the time weed control is desired.
Precautions: <ul style="list-style-type: none">• Pre-transplant applications may result in initial, but temporary, crop injury (leaf cupping or crinkling) and is enhanced if crop leaves come in direct contact with treated soil. Crop will rapidly outgrow this condition and develop normally. Severe crop injury may result if transplants are under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides or storage conditions. The use of transplants less than 5 weeks old or use of extremely succulent transplants grown in containers less than 1 inch square may increase the severity of crop injury. Hardening off, increasing the age of transplants or increasing the size of the rooting containers will lessen the possibility and/or severity of potential crop injury.• BLASTWAVE 240 EC will assist in early season annual grass control, however, a herbicide program for preemergence or postemergence control of annual grasses is advised.• Applications to muck soils may result in partial weed control or suppression.• Furrow and drip irrigation immediately after transplanting and under high temperatures can result in increased crop injury. Sprinkler irrigation is advised during early establishment of transplants. If these conditions cannot be met, BLASTWAVE 240 EC herbicide must not be used.		
Crop-Specific Restrictions: <ul style="list-style-type: none">• DO NOT apply more than 2 pints (0.5 lbs. a.i.) of BLASTWAVE 240 EC per treated acre per year.• DO NOT make more than one application per year.• DO NOT apply more than 2 pints (0.5 lbs. a.i.) of BLASTWAVE 240 EC broadcast per acre in a single application.• DO NOT apply BLASTWAVE 240 EC as a preemergence treatment to direct-seeded broccoli, cabbage or cauliflower.• DO NOT apply BLASTWAVE 240 EC post-transplant or over-the-top of broccoli, cabbage or cauliflower.		

Key Weeds Controlled:

Preemergence
carpetweed pigweed, redroot purslane, common smartweed, Pennsylvania

CACAO (BEARING AND NONBEARING)
(For Use Only in Hawaii)

BLASTWAVE 240 EC may be applied as a pre-transplant treatment or to established or recently transplanted cacao

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	2 – 8 (0.5 – 2.0 lbs. a.i.)	<p>Pre-transplant Application: Up to 4 pints (1.0 lbs. a.i.) per acre may be applied as a pre-transplant application.</p> <p>Application to Established Plantings: In established plantings, including recently transplanted cacao plants, apply as a directed spray to the orchard floor. Use higher rates in rate range and increase spray volume to control dense growth of existing weeds or for extended residual preemergence weed control.</p>
<p>Precautions:</p> <ul style="list-style-type: none"> BLASTWAVE 240 EC must be applied to only healthy growing trees/transplants of suitable size to allow directed sprays. Avoid spray contact with foliage. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> DO NOT apply more than 8 pints (2.0 lbs. a.i.) of BLASTWAVE 240 EC per acre as a single application. DO NOT apply more than 24 pints (6.0 lbs. a.i.) per acre per year. DO NOT make more than 4 applications per acre per year when using reduced application rates. DO NOT make follow up applications within 10 weeks of previous application. Preharvest Interval: DO NOT apply BLASTWAVE 240 EC within 1 day of harvest. DO NOT apply preplant or preemergence to direct-seeded cacao. 		

Key Weeds Controlled:

Preemergence	Postemergence
ageratum buttonweed croton purslane, common spurge, garden	purslane, common spurge, garden

CITRUS (NONBEARING)

Citrus, including Calamondin, Chironja, Citrus Citron, Grapefruit, Kumquat, Lemon, Lime, Mandarin, Pummelo, Satsuma Mandarin, Sour Orange, Sweet Orange, Tangelo, Tangerine, Tangor

BLASTWAVE 240 EC may be applied only in non-bearing citrus orchards. Apply only as a directed spray to the orchard floor avoiding contact with citrus foliage.

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	6 (1.5 lbs. a.i.)	Preemergence Weed Control: Up to 6 pint/acre (1.5 lbs. a.i.) may beapplied for residual preemergence weed control.
Postemergence	2 – 6 (0.5 – 1.5 lbs. a.i.)	Postemergence Weed Control: The 6 pint/acre (1.5 lbs. a.i.) rate will control weeds up to 4 inches tall. Weeds greater than 4-leaf or 4 inches tall may be partially controlled. Use sufficient spray volume for complete and uniform coverage of weeds. Increase the spray volume with increased weed height and density to ensure complete coverage.
<p>Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions.</p> <ul style="list-style-type: none"> • Preemergence Use: For residual control of grass weeds, BLASTWAVE 240 EC may be tank mixed with grass herbicides labeled for use in citrus. • Postemergence Use: For broader spectrum postemergence control of emerged grass and broadleaf weeds, BLASTWAVE 240 EC may be tank mixed with paraquat or glyphosate. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> • Apply BLASTWAVE 240 EC only to nonbearing citrus (trees that will not bear fruit for one year). • DO NOT apply more than 6 pints (1.5 lbs. a.i.) of BLASTWAVE 240 EC per acre per year as a result of a single or multiple applications. • DO NOT apply more than 6 pints (1.5 lbs. a.i.) in a single application. • DO NOT make more than 3 applications per acre per year when using reduced application rates. • DO NOT make follow up applications within 8 weeks of previous application • DO NOT apply during periods of new citrus foliage growth. Applications must be made after foliage has fully expanded and hardened off. Avoid direct spray contact with citrus foliage. • DO NOT apply within 365 days of harvest. 		

Key Weeds Controlled:

(Arizona and California)		(Florida, Louisiana and Texas)	
Preemergence	Postemergence	Preemergence	Postemergence
burclover	cheeseweed (malva)	cutweed, narrowleaf	balsamapple
cheeseweed (malva)	fiddleneck, coast	eveningprimrose, cutleaf ††	cutweed, narrowleaf †††
fiddleneck, coast	filaree, broadleaf †	groundcherry, cutleaf	eveningprimrose, cutleaf ††
filaree, broadleaf	filaree, redstem †	lambquarters, common	groundcherry, cutleaf
filaree, redstem	filaree, whitestem †	nightshade, American black	groundcherry, Wright
filaree, whitestem	groundsel, common	nightshade, black	lambquarters, common
groundsel, common	henbit	pepperweed, Virginia	morningglory, annual
henbit	miners/lettuce	pigweed, redroot	nightshade, American black
knotweed, prostrate	nettle, burning	poinsettia, wild	nightshade, black
lambquarters, common	pigweed, redroot	pusley, florida	pepperweed, Virginia
lettuce, prickly	redmaids	sida, prickly (teaweed)	pigweed, redroot
pigweed, redroot	shepherdspurse	smartweed, Pennsylvania	poinsettia, wild

(Arizona and California)		(Florida, Louisiana and Texas)	
Preemergence	Postemergence	Preemergence	Postemergence
purslane, common redmaids rocket, London shepherdspurse sowthistle, annual spurge, prostrate spurge, spotted	sowthistle, annual	sowthistle, annual spurge, prostrate spurge, spotted	purslane, common pusley, florida sida, prickly (teaweed) smartweed, Pennsylvania sowthistle, annual

† **BLASTWAVE 240 EC** at the 6 pint/acre (1.5 lbs. a.i.) will provide control of filaree and other weeds up to 4-inch stage.

Applications to weeds beyond the 4-inch stage may result in partial control.

†† Highest rate and/or multiple applications may be required for acceptable control.

††† Maximum 0.5-inch diameter.

CLARY SAGE
(For Use Only in North Carolina)

Clary Sage (*Salvia sclarea*) Grown and Utilized in the Essence Industry

Weed Control	Rate (pint/acre)	Specific Use Directions
Postemergence	0.5 – 1 (0.125 – 0.25 lbs. a.i.)	BLASTWAVE 240 EC may be applied to established clary sage for control of henbit (<i>Lamium amplexicaule</i>) and other winter annual broadleaf weeds during the winter and spring season. Apply shortly after the first flush of henbit is in the 2- to 4-leaf stage of growth. Additional applications may be required to control subsequent weed flushes through the spring season. After treatment, henbit will stop growing and slowly die. Increase the spray volume if weed growth is dense.
Precautions:		
<ul style="list-style-type: none"> Clary sage may respond to the topical application of this product with some marginal leaf burn, but recovery is rapid. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> DO NOT apply more than 1 pints (0.25 lbs. a.i.) in a single application DO NOT apply more than 6 pints (1.5 lbs. a.i.) per acre per year. DO NOT make more than 6 applications per year. DO NOT make follow up applications within 8 weeks of previous application. DO NOT make last application within 5 days of harvest. 		

COFFEE (BEARING AND NONBEARING)
(For Use Only in Hawaii)

BLASTWAVE 240 EC may be applied to established coffee, recently transplanted coffee, or as a pre-transplant treatment. In established non-dormant coffee, apply as a directed spray avoiding contact with crop foliage. Newly established transplants must be healthy and well established and of sufficient size to allow use of directed sprays without contacting crop foliage.

BLASTWAVE 240 EC may be applied over-the-top of dormant coffee transplants. Transplants are considered to be dormant when active terminal growth has ceased and terminal buds have formed. Application over-the-top of coffee plants after buds start to swell (a sign that new growth has resumed) may result in crop injury.

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	2 – 8 (0.5 – 2.0 lbs a.i.)	<p>Preemergence Weed Control:</p> <ul style="list-style-type: none"> • Apply as a directed spray to the orchard floor beneath established coffee plants. • Up to 4 pints (1.0 lbs. a.i.) per acre may be applied as a pre-transplant application prior to transplanting coffee plants. <p>Postemergence Weed Control:</p> <ul style="list-style-type: none"> • Increase the spray volume when weed growth is dense or trash is present; or use a higher rate within the rate range for extended residual preemergence weed control.
Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions. Apply tank mixes only as directed sprays.		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> • To prevent foliar injury, DO NOT apply during periods of rapid new growth or allow spray or drift to contact actively growing foliage. • DO NOT apply preplant or preemergence to direct-seeded coffee. • DO NOT apply more than 8 pints (2.0 lbs. a.i.) broadcast per acre of BLASTWAVE 240 EC in a single application. • DO NOT apply more than 24 pints (6.0 lbs. a.i.) broadcast per acre per year. • DO NOT make more than 4 applications per year when using reduced application rates. • Minimum retreatment interval between applications is 10 weeks. • Preharvest Interval: DO NOT apply BLASTWAVE 240 EC within one (1) day of harvest. 		

Key Weeds Controlled:

Preemergence	Postemergence
ageratum buttonweed crotalaria purslane, common spurge, garden	purslane, common spurge, garden

**CONIFER SEEDBEDS, TRANSPLANTS, CONTAINER STOCK AND
SELECTED FIELD GROWN DECIDUOUS TREES**

Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions. Apply tank mixes only as directed sprays.

Crop-Specific Restrictions:

- Apply **BLASTWAVE 240 EC** only to healthy conifer stock. **DO NOT** apply **BLASTWAVE 240 EC** to conifers that are under stress from excessive fertilizer or soil salts, disease, nematodes, frost, drought, flooding, previously applied pesticides, soil insects, or winter injury, as severe injury may result.
- **DO NOT** apply for conifer release in forest management programs or for forest regeneration applications.
- **DO NOT** graze or harvest livestock forage from treated areas.
- **DO NOT** apply **BLASTWAVE 240 EC** in an enclosed greenhouse structure as injury to plant foliage may result.
- **DO NOT** store or transport treated container stock in an enclosed structure until completion of 4 irrigations (minimum 21 days) as injury to non-labeled plants may occur.

Key Weeds Controlled: When **BLASTWAVE 240 EC** is applied preemergence or postemergence at specified dosages and weed stages.

barnyardgrass † bedstraw, catchweed bittercress, lesser bluegrass, annual † buckwheat, wild burclover carpetweed clover, red † clover, white † cocklebur, common crabgrass, large † fiddleneck, coast † filaree, broadleaf filaree, redstem fireweed (from seed) flixweed	foxtail, giant † goosegrass † groundcherry, cutleaf groundcherry, wright groundsel, common henbit jimsonweed knotweed, prostrate ladysthumb lambsquarters, common lettuce, prickly mallow, little mayweed minerslettuce morningglory, ivyleaf † morningglory, tall †	mustard, blue mustard, tumble mustard, wild nettle, burning nightshade, black nightshade, hairy oats, wild orach, red pepperweed, yellowflower pigweed, prostrate pigweed, redroot pimpernel, scarlet purslane, common redmaids rocket, London sandspurry, red	shepherdspurse † sida, prickly smartweed, Pennsylvania sorrel, red (from seed) sowthistle, annual speedwell, birdseye spurge, prostrate †† spurge, spotted †† spurry, corn tansymustard thistle, bull †† thistle, Russian velvetleaf witchgrass woodsorrel, yellow ††
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† Highest rate and/or multiple applications may be required for acceptable control.

†† Preemergence control only.

CONIFER SEEDBEDS

BLASTWAVE 240 EC provides both postemergence and residual preemergence control of many broadleaf weeds and annual grass species.

Seeded conifers are tolerant to preemergence and postemergence applications of **BLASTWAVE 240 EC**. For weed control during the establishment of conifer seedlings, **BLASTWAVE 240 EC** can be applied after seeding of conifers, but prior to emergence. For weed control in emerged conifers, **BLASTWAVE 240 EC** may be applied over-the-top, but application must be delayed a minimum of 5 weeks after seedling emergence. If application is made during cool, cloudy weather, make certain that seedlings have hardened-off prior to spraying.

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	1 – 4 (0.25 – 1.0 lbs. a.i.)	Application after planting, but prior to emergence of conifer seedlings: Where grass weeds are present, apply 2 to 4 pints (0.5 – 1.0 lbs. a.i.) per acre. In known areas of high weed competition, apply 4 pints (1.0 lbs. a.i.) of BLASTWAVE 240 EC per acre. Broadcast to beds and irrigate with 1/2 to 3/4 inch of sprinkler irrigation before weed emergence. BLASTWAVE 240 EC is most effective on annual grasses when applied preemergence.
Postemergence	1 – 2 (0.25 – 0.5 lbs. a.i.)	Application after emergence of conifer seedlings: Application must be made to seedling weeds less than 4 inches in height (seedling grasses not exceeding the 2-leaf stage). Depending of subsequent weed flushes, multiple applications may be necessary to achieve year-long weed control.
Chemigation: BLASTWAVE 240 EC may be applied at labeled rates through sprinkler irrigation systems. For center pivot irrigation systems, apply the specified dosage of BLASTWAVE 240 EC per acre metered at a continuous uniform rate during the entire irrigation period, otherwise meter BLASTWAVE 240 EC at a continuous uniform rate during the middle 1/3 of the irrigation period. When applying by sprinkler irrigation, follow directions given in the Chemigation Instructions section of this label.		
Precautions:		
<ul style="list-style-type: none"> • Occasionally spotting, crinkling, or flecking may appear on leaves of conifers. Leaves that receive direct spray or drift may be injured, but typically outgrow this condition rapidly and develop normally. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> • DO NOT apply more than 8 pints (2.0 lbs. a.i.) of BLASTWAVE 240 EC per acre per year. • DO NOT apply more than 4 pints/Acre (1.0 lbs. a.i.) in a single application. • DO NOT make more than 4 applications per year when using reduced application rates. • DO NOT make follow up applications within 8 weeks of previous application 		

Important: When applied as directed, the conifer species listed on this label have shown tolerance to **BLASTWAVE 240 EC**. It is impossible, however, to evaluate this product on all varieties, biotypes and cultivars of listed species under all possible growing conditions. Until familiar with results under local growing conditions, the user must exercise reasonable judgement and caution with this product. Limit application of this product to a few plants in a small area to determine plant tolerance and extent of injury if such occurs, prior to initiating large-scale applications.

Douglas Fir	<i>Pseudotsuga menziesii</i>	
Fir	Fraser (<i>Abies fraseri</i>) Grand (<i>Abies grandis</i>)	Noble (<i>Abies procera</i>)
Hemlock	Eastern hemlock (<i>Tsuga canadensis</i>)	
Pine	Austrian (<i>Pinus nigra</i>) Eastern White (<i>Pinus strobus</i>) Himalayan (<i>Pinus wallichiana</i>) Jack (<i>Pinus banksiana</i>) Loblolly (<i>Pinus taeda</i>) Lodgepole (<i>Pinus contorta</i>) Longleaf (<i>Pinus palustris</i>)	Monterey (<i>Pinus radiata</i>) Mugho (<i>Pinus mugo</i>) Ponderosa (<i>Pinus ponderosa</i>) Scotch (<i>Pinus sylvestris</i>) Shortleaf (<i>Pinus echinata</i>) Slash (<i>Pinus elliotii</i>) Virginia (<i>Pinus virginiana</i>)
Spruce	Blue (<i>Picea pungens</i>) Dwarf (<i>Picea glauca Conica</i>)	Alberta (<i>Picea abies</i>) Norway (<i>Picea sitchensis</i>)

CONIFER TRANSPLANTS AND CONTAINER STOCK
(INCLUDES 2-0 SEEDLING AND CHRISTMAS TREE PLANTINGS)

Many container-grown conifers and conifer transplants are tolerant to preemergence and postemergence applications of **BLASTWAVE 240 EC**. Applied postemergence, **BLASTWAVE 240 EC** provides postemergence control of emerged weeds and preemergence residual control of many broadleaf weeds and grasses (see Key Weeds Controlled) at the beginning of this section.

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	4 – 8 (1.0 – 2.0 lbs. a.i.)	Transplanted and Container Grown Conifers: For best results, make preemergence applications immediately after transplanting seedlings or to weed-free container stock. Make postemergence applications to weeds less than 4 inches in height. Two applications may be necessary, in fall-transplanted conifer fields, for year-long weed control. The addition of a non-ionic surfactant (0.25% v/v) labeled for application to growing crops, enhances the activity of BLASTWAVE 240 EC on emerged weeds.
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> • DO NOT apply more than 8 pints (2.0 lbs. a.i.) of BLASTWAVE 240 EC per acre in a single application. • DO NOT apply more than 16 pints (4.0 lbs. a.i.) per acre per year. • DO NOT make more than 4 applications per acre per year when using reduced application rates. • DO NOT make follow up applications within 8 weeks of previous application. • DO NOT make over-the-top applications during periods of active conifer growth. Apply only before bud break or after new terminal growth has hardened off. 		

In addition to those conifer species listed under the Conifer Seedbed section, the following conifer species have been shown to be tolerant to **BLASTWAVE 240 EC**:

Arborvitae	<i>Thuja occidentalis</i> <i>Thuja orientalis</i>
Juniper	<i>Juniperus chinensis</i> <i>Juniperus horizontalis</i> <i>Juniperus procumbens</i> <i>Juniperus sabina</i> <i>Juniperus scopulorum</i>
Red cedar	<i>Juniperus virginiana</i>
Western Hemlock	<i>Tsuqa heterophylla</i>
Yew	<i>Taxus species</i>

SELECTED FIELD-GROWN DECIDUOUS TREES

Listed field-grown deciduous trees are tolerant only to directed spray applications of **BLASTWAVE 240 EC**. **BLASTWAVE 240 EC** provides both preemergence and postemergence control of listed broadleaf weeds and grasses.

Timing to Crop: Apply **BLASTWAVE 240 EC** to established deciduous trees or after transplanting. For optimum weed control, applications must be made prior to weed germination. Apply only as a directed spray to soil beneath the trees.

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Early postemergence	2 – 6 (0.5 – 1.5 lbs. a.i.)	<p>BLASTWAVE 240 EC may be applied to established deciduous trees or after transplanting as a single or split application. Apply as a directed spray to the soil surface. Use of spray shields to reduce exposure of foliage and bark is advised. The addition of a non-ionic surfactant (0.25% v/v) labeled for application to growing crops, will enhance herbicidal activity on emerged weeds.</p> <p>Spot Application: Spot treatments at specified rates may be used to control localized weed infestations. See use directions for Spot Application in the Application Methods and Cultural Practices section.</p>
<p>Tank Mixing: For broader spectrum control, BLASTWAVE 240 EC may be tank mixed with other preemergence or postemergence herbicides registered for this use in deciduous trees. Refer to Mixing Directions section for Tank Mixing Precautions. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.</p>		
<p>Precautions:</p> <ul style="list-style-type: none"> For maximum crop safety, directed applications must be prior to budbreak in the spring or after trees have initiated dormancy in the fall. Avoid contact of spray or drift with foliage or stems with green bark. Application after bud swell may result in crop injury and is not advised. If a non-dormant application is required due to weed competition, apply only after foliage has fully expanded and hardened off. Use only directed sprays and spray shields to prevent spray contact with stems with green bark or foliage. 		

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Crop-Specific Restrictions:

- **DO NOT** apply **BLASTWAVE 240 EC** to trees that have been weakened or are under stress from excessive fertilizer or soil salts, disease, nematodes, frost, wind injury, drought, flooding, previously applied pesticides, insects, or winter injury as severe injury may result.
- **DO NOT** apply more than 6 pints (1.5 lbs. a.i.) of **BLASTWAVE 240 EC** per acre per year.
- **DO NOT** apply more than 6 pints (1.5 lbs. a.i.) per acre in a single application.
- **DO NOT** make more than 3 applications per acre per year when using reduced application rates.
- **DO NOT** make follow up applications within 8 weeks of previous application.
- **DO NOT** apply to bearing tree fruit, nut and vine crops. For selected bearing tree fruit, nut and vine crops, refer to Tree Fruit/Nut/Vine section of this label for use directions.
- **DO NOT** graze or feed livestock forage cut from areas treated with **BLASTWAVE 240 EC**.

BLASTWAVE 240 EC may be applied to the following deciduous tree species:

Almond ††	<i>Prunus spp.</i>
Apple ††	<i>Malus X domestica</i>
Apricot ††	<i>Prunus spp.</i>
Ash, Green	<i>Fraxinus pennsylvanica</i>
Ash, White	<i>Fraxinus Americana</i>
Birch, River	<i>Betula nigra</i>
Cherry ††	<i>Prunus spp.</i>
Chestnut ††	<i>Castanea spp.</i>
Crabapple ††	<i>Malus spp.</i>
Cottonwood	<i>Populus spp.</i>
Dogwood	<i>Cornus florida</i>
Eucalyptus	<i>Eucalyptus viminalis</i> <i>Eucalyptus pulverulenta</i> <i>Eucalyptus camaldulensis</i>
Filbert ††	<i>Corylus spp.</i>
Lilac	<i>Syringa vulgaris</i>
Locust, Black	<i>Robinia pseudoacacia</i>
Maple, Black †	<i>Acer nigrum</i>
Maple, Red †	<i>Acer rubrum</i>
Maple, Sugar †	<i>Acer saccharum</i>
Myrtle, Crepe	<i>Lagerstroemia indica</i>
Nectarine ††	<i>Prunus spp.</i>
Nut, Hickory ††	<i>Carya spp.</i>
Nut, Macadamia	<i>Macadamia ternifolia</i>
Oak, Chestnut	<i>Quercus prinus.</i>
Oak, Cherrybark	<i>Quercus pagoda</i>
Oak, Nutt All	<i>Quercus nuttallii</i>
Oak, Pin	<i>Quercus palustris</i>

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Oak, Red	<i>Quercus rubra</i>
Oak, Water	<i>Quercus nigra</i>
Oak, Willow	<i>Quercus phellos</i>
Olive, Russian	<i>Elaeagnus angustifolia</i>
Poplar	<i>Populus spp.</i>
Poplar, Tulip	<i>Liriodendron tulipifera</i>
Peach ††	<i>Prunus persica</i>
Pear ††	<i>Pyrus spp.</i>
Pecan ††	<i>Carya spp.</i>
Pistachio ††	<i>Pistacia vera</i>
Plum ††	<i>Prunus spp.</i>
Prune ††	<i>Prunus spp.</i>
Redbud	<i>Cercis canadensis</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Sycamore	<i>Platanus occidentales</i>
Walnut, Black ††	<i>Juglans nigra</i>

† **DO NOT** apply to maple trees used for production of maple cap or maple syrup.

†† Apply only to nonbearing trees. For bearing trees fruit, nut and vine crops, refer to specific use directions in the Tree fruit/Nut/Vine section of this label.

CORN

FOR USE ONLY ON FIELD CORN IN CONJUNCTION WITH THE USDA WITCHWEED ERADICATION PROGRAM IN NORTH CAROLINA AND SOUTH CAROLINA

Apply **BLASTWAVE 240 EC** only as a directed spray from May through August for pre-emergence and post-emergence control of witchweed (*Striga asiatica*). Corn must be a minimum of 24 inches tall. Examine witchweed infested fields during the early part of the growing year to determine uniformity of corn stand and grass weed pressure. If necessary, cultivate weed-infested fields prior to initial application of **BLASTWAVE 240 EC** to allow for optimum soil coverage during the initial application. Inspect fields treated with **BLASTWAVE 240 EC** regularly for any break through of witchweed. If break through occurs, make a second application as soon as possible after appearance of witchweed. Repeat treatment prior to bloom stage to prevent seed set.

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	2 – 3 (0.5 – 0.75 lbs. a.i.)	Initial Application: Apply as a directed spray over the entire row surface at the rate of 2 pints (0.5 lbs. a.i.) per acre. Use up to 3 pints (0.75 lbs. a.i.) per acre in areas of heavy witchweed infestation. Use a minimum spray volume of 20 gallons per acre and a non-ionic surfactant at the time of 2 pints per 100 gallons of spray.
Postemergence	1 – 2 (0.25 - 0.5 lbs. a.i.)	Repeat Applications: In case of witchweed breakthrough a repeat application may be made at 1 to 2 pints (0.25 - 0.5 lbs. a.i.) per acre.
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> • DO NOT apply more than 5 pints (1.25 lbs. a.i.) of BLASTWAVE 240 EC per acre during the year. • DO NOT apply more than 3 pints (0.75 lbs. a.i.) per acre in a single application. 		

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Crop-Specific Restrictions:

- **DO NOT** make more than 3 applications per acre per year when using reduced application rates.
- **DO NOT** make follow up application within 10 weeks of first application.
- **DO NOT** apply any application within 60 days of harvest.
- **DO NOT** use corn plants from a treated field for green chop, ensilage, forage, or fodder.
- **DO NOT** spray over the top of the corn, as this may result in severe corn injury. Spray must contact only the lower 3 to 8 inches of the corn stalk and any leaves in this zone. Spray droplets contacting the lower leaves will cause necrotic spotting or streaking of sprayed tissue.

COTTON

Application Methods and Equipment: **BLASTWAVE 240 EC** may be applied as a post-direct spray to cotton a minimum of 6 to 8 inches tall. Care must be exercised to avoid spray contact with the cotton leaves. Use rigid precision ground spray equipment and spray shields to prevent spray contact with cotton foliage. Use branch lifters or shields, as necessary, to avoid contact of directed sprays with cotton plant.

Accurate, placement of spray nozzles is essential for uniform coverage of weeds and to minimize injury to cotton plants. Use a minimum broadcast spray volume of 20 gallons per acre and operate the sprayer at the minimum spray pressure specified by the spray nozzle manufacturer. **BLASTWAVE 240 EC** may be applied as a post-direct spray with only 2 flat fan nozzles per row (1 nozzle on each side of the row). For optimum coverage, use 4 flat fan nozzles per row (2 nozzles on each side of the row). Point forward and downward the two forward nozzles while the rear nozzles are pointed to the rear and downward. With either sprayer setup, adjust the nozzles carefully to cover the weed foliage with minimum contact to cotton plants. **BLASTWAVE 240 EC** may also be applied as a band application. **DO NOT** use hollow cone nozzles.

Tank Mixing: For control of additional broadleaf and grass weeds, **BLASTWAVE 240 EC** may be applied as a postemergence directed spray in tank mix combination with other herbicides registered for postemergence use in cotton (see Tank Mixing Precautions under Mixing Directions). It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Weed Control	Rate (pint/acre)	Specific Use Directions
Postemergence	1 - 2 (0.25 - 0.5 lbs. a.i.)	Apply as a post-directed spray. For optimum control, use the 2 pints (0.5 lbs. a.i.) per acre rate on actively growing weed seedlings with no more than 4 true leaves (not counting cotyledon leaves). Effective control of succulent weeds at the 2- to 3-leaf stage can usually be obtained at the 1 pint (0.25 lbs. a.i.) per acre rate. See Mixing Directions for surfactant specification. Where available, irrigation may be applied prior to application of BLASTWAVE 240 EC to encourage maximum weed emergence. Irrigation following application will improve preemergence activity of BLASTWAVE 240 EC against nightshade and groundcherry species.

Precautions:

- Exercise care to avoid spray contact with cotton leaves. Leaves accidentally sprayed will exhibit necrotic (dead) spots and may be dropped from the plant. Crop injury may be enhanced if application is made when excessive soil moisture is present or rainfall occurs immediately after application, however, cotton will outgrow this condition and develop normally.

Crop-Specific Restrictions:**Western Cotton (AZ and CA):**

- **DO NOT** apply more than 2 pints (0.5 lb. a.i.) of **BLASTWAVE 240 EC** per acre in a single application, or more than a total of 4 pints (1.0 lb. a.i.) of **BLASTWAVE 240 EC** broadcast per acre per year as a result of multiple applications.
- **DO NOT** make follow up applications within 10 weeks of previous application.
- **DO NOT** apply within 75 days of harvest of Western Cotton.
- **DO NOT** apply to cotton less than 6 inches tall or severe crop injury will result.

Southern Cotton (All other states):

- **DO NOT** apply more than 2 pints (0.5 lb. a.i.) of **BLASTWAVE 240 EC** per acre of per year as a result of a single application or multiple applications.
- **DO NOT** apply more than 2 pints (0.5 lbs. a.i.) per acre in a single application.
- **DO NOT** make more than 2 applications per acre per year when using reduced application rates.
- **DO NOT** make follow up applications within 10 weeks of previous application.
- **DO NOT** apply within 90 days of harvest of Southern Cotton.
- **DO NOT** apply to cotton less than 6 inches tall or severe crop injury will result.

Key Weeds Controlled:**Postemergence**

cocklebur, common croton, tropic groundcherry, cutleaf groundcherry, Wright jimsonweed	lambsquarter, common morning glory, annual (up to 6 leaf) nightshade, American black nightshade, black	nightshade, hairy pigweed, redroot poinsettia, wild † purslane, common sesbania, hemp	sicklepod †† sida, prickly (teaweed)† smartweed, Pennsylvania velvetleaf
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† Multiple applications may be required for acceptable control.

†† Post-direct applications of **BLASTWAVE 240 EC** will control or suppress seedlings not exceeding the onetrue leaf stage.

COTTONWOOD

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	4 – 6 (1.0 – 1.5 lbs a.i.)	BLASTWAVE 240 EC may be applied as a single or split application. Apply as a directed spray to soil at the base of cottonwood trees. Use the higher rate in the rate range for extended preemergence weed control or for Postemergence control of weeds up to the 6 leaf stage. The addition of a non-ionic surfactant at 2 pints per 100 gallons of spray will enhance the Postemergence activity of BLASTWAVE 240 EC on emerged weeds.

Precautions:

- Apply **BLASTWAVE 240 EC** immediately after transplant only to dormant healthy cottonwood stock.

Crop-Specific Restrictions:

- **DO NOT** apply more than 6 pints (1.5 lbs. a.i.) per acre of **BLASTWAVE 240 EC** in a single application.
- **DO NOT** apply more than 18 pints (4.5 lbs. a.i.) per acre per year.
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.

Crop-Specific Restrictions:

- **DO NOT** make follow up applications within 8 weeks of previous application.
- In established stands, **DO NOT** allow sprays of **BLASTWAVE 240 EC** to contact cottonwood foliage. In newly established cottonwood plantings, use spray shields, if necessary, to prevent exposure of green bark and foliage.

Key Weeds Controlled:

groundsel, common knotweed, prostrate lambquarter	mustard, hedge shepherdspurse smartweed, Pennsylvania
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EUCALYPTUS

Apply **BLASTWAVE 240 EC** for preemergence and postemergence control of listed broadleaf weeds in established eucalyptus plantings.

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	4 – 6 (1.0 – 1.5 lbs. a.i.)	<p>Directed Spray: BLASTWAVE 240 EC may be applied as a single or split application. Apply as a directed spray to soil at the base of eucalyptus trees. Use the higher rate in the rate range for extended preemergence weed control or for postemergence control of weeds up to the 6 leaf stage.</p> <p>The addition of a non-ionic surfactant at the rate of 2 pints per 100 gallons of spray will enhance the postemergence activity of BLASTWAVE 240 EC on emerged weeds.</p> <p>Over-the-Top Application: In new plantings, apply BLASTWAVE 240 EC just before or immediately after transplanting eucalyptus seedlings that are in a dormant condition (i.e., leaves may be present, but terminal growth has hardened off and terminal buds have formed). In established plantings, BLASTWAVE 240 EC may be applied as an over-the-top spray when plants are in a dormant condition.</p>
Precautions:		
<ul style="list-style-type: none"> • At transplant, apply BLASTWAVE 240 EC only to healthy "dormant" healthy eucalyptus stock. In established plantings, use spray shields, if needed, to prevent exposure of foliage and bark of small and/or actively growing plants. • To avoid phytotoxicity, make over-the-top applications only to eucalyptus trees in a dormant condition. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> • DO NOT apply more than 6 pints (1.5 lbs. a.i.) of BLASTWAVE 240 EC per acre in a single application. • DO NOT apply more than 18 pints (4.5 lbs. a.i.) per acre per year. • DO NOT make more than 4 applications per acre per year when using reduced application rates. • DO NOT make follow up applications within 8 weeks of previous application. • DO NOT make over-the-top applications after bud break and resumption of active growth. 		

Key Weeds Controlled:

Preemergence		Postemergence	
burclover	pigweed, redroot	cheeseweed (malva)	minerslettuce
cheeseweed (malva)	purslane, common	fiddleneck, coast	nettle, burning
fiddleneck, coast	redmaids	filaree, broadleaf †	pigweed, redroot
filaree, broadleaf	rocket, London	filaree, redstem †	redmaids
filaree, redstem	shepherdspurse	filaree, whitestem †	shepherdspurse
filaree, whitestem	sowthistle, annual	groundsel, common	sowthistle, annual
groundsel, common	spurge, prostrate	henbit	
lettuce, prickly	spurge, spotted		

† At the 6-pint rate, **BLASTWAVE 240 EC** will provide control of filaree up to the 6-leaf stage.

USE ON FALLOW BEDS

(Not for use prior to planting soybeans in California)

Used alone or in tank mix combination with glyphosate, **BLASTWAVE 240 EC** provides preemergence and/or postemergence control of winter annual broadleaf weeds on land to be planted to crops.

Prior to planting, treated fallow beds must be thoroughly tilled (incorporated) to a depth of at least 2.5 inches. **BLASTWAVE 240 EC** is no longer herbicidally effective once the active layer in the soil surface is disrupted by soil incorporation.

Aerial Application: **BLASTWAVE 240 EC** may be aerially applied for weed control in fallow beds. Follow requirements for Aerial Application in the Product Use Information section of this label.

Minimum Treatment to Planting Intervals for listed crops:

Direct Seeded Crops	Minimum Treatment-to-Planting Interval	
	BLASTWAVE 240 EC (up to 1 pint/acre)	BLASTWAVE 240 EC (>1 to 2 pints/acre)
carrot	90 days	90 days
cotton	7 days	7 days
potato	60 days	60 days
sugar beet	60 days	90 days
other root/tuber crops	90 days	90 days
onions	180 days	180 days
other bulb vegetables	180 days	180 days
cabbage	90 days	90 days
cauliflower	90 days	90 days
other brassica crops	120 days	120 days
lettuce	90 days	120 days
other leafy vegetables (except brassica crops)	120 days	120 days
pepper	90 days	120 days
tomato	60 days	120 days
other fruiting vegetables	120 days	120 days
cantaloupe	60 days	90 days

(continued)

Direct Seeded Crops	Minimum Treatment-to-Planting Interval	
	BLASTWAVE 240 EC (up to 1 pint/acre)	BLASTWAVE 240 EC (>1 to 2 pints/acre)
squash	90 days	120 days
watermelon	60 days	60 days
other cucurbits	90 days	120 days
dry beans	60 days	60 days
Peanut	60 days	60 days
other legume vegetables	60 days	60 days
safflower	60 days	60 days
Soybeans (Except California)	7days	7 days
cereal grains: Including barley, buckwheat, corn, proso millet, pearl millet, oats, popcorn, rice, rye, sorghum, tritcale, wheat, and wild rice	10 months	10 months
cotton and soybean	(see specific labeling for fallow beds to be planted to cotton or soybeans)	

Transplanted Crops	Minimum Treatment-to-planting Interval	
	BLASTWAVE 240 EC (up to 1 pint/acre)	BLASTWAVE 240 EC (>1 to 2 pints/acre)
celery	30 days	30 days
conifer	0 days	0 days
garlic	0 days	30 days
grape/kiwi	0 days	0 days
onion	0 days	30 days
pepper	30 days	30 days
strawberries	30 days	30 days
tomato	30 days	30 days
Tree fruit/nut/citrus	0 days	0 days

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	1 – 2 (0.25 - 0.5 lbs. a.i.)	Use 20 or more gallons of spray volume per acre and increase spray volume for dense weed growth. Use the 1 pint (0.25 lbs. a.i.) per acre rate for up to 4 weeks of preemergence control and postemergence control of susceptible weeds up to 4-leaf stage. Use the 2 pint (0.5 lbs. a.i.) per acre rate for up to 8 weeks of preemergence control and postemergence control of susceptible weeds up to 6-leaf stage. Best preemergence control is achieved when irrigation or rainfall occurs within 3 or 4 weeks after application.

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	1 – 2 (0.25 - 0.5 lbs. a.i.)	<p>A tank mix with glyphosate is advised if the treatment area contains dense weed populations, oversized weed seedlings, volunteer grains, annual grasses or under unfavorable environmental conditions.</p> <p>Outside of California: For enhanced contact activity (burndown/suppression) tank mix 6.5 fl oz (0.1 lbs. a.i.) of BLASTWAVE 240 EC with the labeled rate of either glyphosate or paraquat. Apply at the application rate and weed growth stages specified in the respective tank mix product label. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.</p>
<p>Precautions:</p> <ul style="list-style-type: none"> • Failure to achieve thorough and complete incorporation, or to follow the specified treatment-planting interval, may result in stand reduction and/or vigor reduction of the planted crop. • Crop injury may be enhanced if newly seeded crops or transplants are under stress due to drought, flooding, excessive fertilizer or soil salts, low soil temperatures, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects or diseases. • Exercise extreme care to avoid herbicide contact with any desirable dormant or non-dormant crop, plant, tree or vegetation as severe injury may result. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 2 pints (0.5 lbs. a.i.) of BLASTWAVE 240 EC per acre per year. • DO NOT apply more than 2 pints (0.5 lbs. a.i.) of BLASTWAVE 240 EC broadcast per acre in a single application. • DO NOT make more than 2 applications per acre per year when using reduced application rates. • DO NOT make a follow up application within 10 weeks of first application. 		

Key Weeds Controlled:

BLASTWAVE 240 EC provides preemergence and postemergence control of the following weeds on fallow beds:[†]

buttercup, smallflower cheeseweed (malva) eveningprimrose, cutleaf †† fiddleneck, coast filaree, broadleaf filaree, redstem geranium, Carolina groundcherry, cutleaf groundsel, common henbit ladythumb minerslettuce	mustard species nettle, burning oxalis pigweed, redroot purslane, common redmaids rocket, London shepherdspurse sida, prickly sowthistle, annual velvetleaf (wild common)
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[†] Thorough spray coverage is essential to maximize the postemergence activity of **BLASTWAVE 240 EC**. For postemergence control when applied by air, a tank mixture of **BLASTWAVE 240 EC** with either glyphosate or paraquat is specified.

^{††} Requires maximum rate and/or multiple applications for effective control.

GARBANZO BEANS
(For Use Only in Arizona and California)

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	1 (0.25 lbs. a.i.)	Apply after planting but prior to weed or crop emergence as a single broadcast application using a spray volume of 20 or more gallons of water per acre.
Precautions:		
<ul style="list-style-type: none"> Garbanzo beans are resistant to preemergence application of BLASTWAVE 240 EC, however, under certain conditions, severe but temporary crop injury may occur. A heavy splashing rain shortly after crop emergence or wet soil conditions during early growth stages can cause leaf cupping, crinkling, stunting or defoliation of the garbanzo seedlings. Injury, when it occurs, it is usually limited to the first few leaves that develop after plants emerge from the soil. Delays in crop development and/or maturity may result, but Garbanzo beans do recover with little to no impact on yield. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> DO NOT apply more than 1 pint (0.25 lbs. a.i.) per acre of BLASTWAVE 240 EC in a single application. DO NOT apply more than 1 pint (0.25 lbs. a.i.) per acre of BLASTWAVE 240 EC in a year. Make only one application per year. DO NOT apply within 30 days of harvest. DO NOT use bean vines for livestock feed or hay. 		

Key Weeds Controlled:

Preemergence
groundsel, common mallow, little rocket, London Shepherdspurse

GARLIC

Cultural Considerations: For optimum preemergence weed control, the soil surface must be smooth and free of excessive trash (clippings, plant residues, etc.). Following application, treated beds must be left undisturbed during the time period for which weed control is desired. Cultural practices that result in soil disturbance or redistribution of untreated soil can result in reduced weed control.

Direct Seeded Garlic (Postemergence Application):		
Weed Control	Rate (per acre)	Specific Use Directions
Postemergence	2 - 4 fl oz (0.003 – 0.006 lbs. a.i.)	Northeastern States Including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Apply BLASTWAVE 240 EC at 2 to 4 fl oz (0.003 – 0.006 lbs. a.i.) per acre to seeded garlic that has at least 3 true leaves using ground equipment. Multiple treatments at 2 to 4 fl oz per acre may be applied up to a maximum of 2 pints (32 fl oz) (0.5 lbs. a.i.) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing. Application at later than 4-leaf growth stage may result in reduced weed control.

(continued)

Direct Seeded Garlic (Postemergence Application):		
Weed Control	Rate (per acre)	Specific Use Directions
Postemergence	0.5 - 1 pint (0.125 - 0.25 lbs. a.i.)	Western States Including Arizona, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah and Washington: Apply BLASTWAVE 240 EC at 0.5 to 1 pint (0.125-0.25 lbs. a.i.) per acre to seeded garlic that has at least 2 true leaves using ground equipment. Multiple treatments at 0.5 to 1 pint (0.125-0.25 lbs. a.i.) per acre may be applied up to a maximum of 2.0 pints (0.5 lbs. a.i.) per acre per year. For optimum postemergence weed control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing. Application at later than 4-leaf growth stage may result in reduced weed control.
Postemergence	0.5 pint (0.125 lbs. a.i.)	All Other States: Apply BLASTWAVE 240 EC at 0.5 pints (0.125 lbs. a.i.) per acre to seeded garlic that has at least 2 true leaves using ground equipment. Multiple treatments at 0.5 pints (0.125 lbs. a.i.) per acre maybe applied up to a maximum of 2 pints (0.5 lbs. a.i.) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing. Application at later than 4-leaf growth stage may result in reduced weed control.

Direct Seeded Garlic (California Only)		
Weed Control	Rate (per/acre)	Specific Use Directions
Preemergence Postemergence	1 pint (0.25 lbs. a.i.)	Application after planting but Prior to Garlic Emergence: Apply BLASTWAVE 240 EC after planting, but prior to crop emergence, for preemergence control of listed broadleaf and grass weeds using ground, air or sprinkler irrigation (chemigation). Aerial Application: Apply in a minimum spray volume of 10 gallons per acre. Follow Aerial Application instructions and precautions in the Product Use Information section of this label. Postemergence and Directed Application: Apply BLASTWAVE 240 EC as a directed or over-the-top spray to garlic that is at least 12 inches tall. Accurate, uniform placement of directed postemergence sprays is essential for effective weed control and to minimize injury to garlic. Use low-pressure sprays and a minimum spray volume of 20 gallons per acre. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing. Application at later than 4-leaf growth stage may result in reduced weed control.

(continued)

Direct Seeded Garlic (California Only)		
Weed Control	Rate (per/acre)	Specific Use Directions
Preemergence Postemergence	1 pint (0.25 lbs. a.i.)	Sprinkler Irrigation (Portable Lateral or Solid Set) Preemergence or Postemergence: Apply BLASTWAVE 240 EC at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Apply after planting but prior to garlic emergence or postemergence when garlic is at least 12 inches tall. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.
Precautions: <ul style="list-style-type: none"> Garlic Response to Preemergence Applications of BLASTWAVE 240 EC: Following a preemergence application of BLASTWAVE 240 EC, a chlorotic band around some of the leaves may be observed after the first irrigation (or rainfall) following garlic emergence. 		

Transplanted Garlic: Postemergence Application Immediately after Planting		
Weed Control	Rate (per/acre)	Specific Use Directions
Postemergence	up to 2 pints (0.5 lbs. a.i.)	All States Except Northeastern States: Transplanted garlic is most tolerant of a postemergence application immediately after transplanting. An application of up to 2 pints (0.5 lbs. a.i.) per acre may be made within two days after transplanting. If less than 2 pints (0.5 lbs. a.i.) per acre is applied, a second application can be made two weeks or more after transplanting. DO NOT exceed the maximum use rate of 2 pints (0.5 lbs. a.i.) per acre of BLASTWAVE 240 EC per year as a result of multiple applications.
Postemergence	2 - 4 fl oz (0.03 – 0.06 lbs. a.i.)	Northeastern States, including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Multiple treatments at 2 to 4 fl oz per acre (0.03-0.06 lbs. a.i.) may be applied up to a maximum of 2 pints (32 fl oz) per acre (0.5 lbs. a.i.) per year.

Key Weeds Controlled:

canarygrass (annual) eveningprimrose, cutleaf groundsel, common mallow, little (malva) nightshade, black pigweed, prostrate † pigweed, redroot †	puncturevine purslane, common † rocket, London sage, lanceleaf shepherdspurse † sowthistle, annual
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† Key weeds controlled at specified rates in Northeastern States.

Garlic - Crop-Specific Precaution (Postemergence Application):

Postemergence applications of **BLASTWAVE 240 EC** may cause chlorotic leaf banding, necrotic lesions, or stunting of the garlic plants. Symptoms may be more severe if garlic emerged under cool, wet, overcast, or foggy weather. These conditions are temporary and will not affect the vigor or development of garlic plants.

Garlic - Crop-Specific Restrictions (Applicable to All Methods of Application):

- In all states except Northeastern states, **DO NOT** apply until direct seeded garlic plants have two (2) fully developed true leaves. In the Northeastern states, **DO NOT** apply until direct seeded garlic plants have three (3) fully developed true leaves. Application made prior to the specified growth stage may result in serious crop injury.
- **DO NOT** apply more than 2 pints (0.5 lbs. a.i.) per acre in a single application.
- **DO NOT** apply more than a total of 2 pints (0.5 lbs. active) per acre of **BLASTWAVE 240 EC** per year as a result of multiple applications.
- **DO NOT** make more than 2 applications per acre per year when using reduced application rates.
- **DO NOT** make follow up applications within 8 weeks of previous application.
- **DO NOT** apply within 60 days of harvest.
- In direct seeded garlic (except in California), **DO NOT** apply **BLASTWAVE 240 EC** as a preemergence treatment.
- Use only on dry bulb garlic.
- **DO NOT** apply to garlic grown for seed.
- For weed control in Garlic, **DO NOT** mix **BLASTWAVE 240 EC** with oils, surfactants, liquid fertilizers.
- **DO NOT** apply to garlic plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, storage conditions, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects, nematodes or diseases.

GRAPES (Non-Dormant Application)
(California Only)

BLASTWAVE 240 EC may be applied as a directed spray or, for supplemental preemergence weed control, through low-volume sprinkler (micro sprinkler) or drip irrigation systems for control or suppression of listed broadleaf weeds non-dormant grapes (raisin and wine grapes only). **BLASTWAVE 240 EC** may also be applied to all grapes (raisin, table, and wine) as a dormant season application. Refer to Treefruit/Nut/Vine Crops (Dormant Application) section above for use directions for dormant season application to grapes.

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	2 (0.5 lbs. a.i.)	BLASTWAVE 240 EC may be applied preemergence or postemergence to weeds either as a directed spray in a minimum spray volume of 20 gallons per acre or through low-volume sprinkler (micro sprinkler) or drip irrigation systems. Repeat applications may be required. Applications may be made from completion of bloom up to 14 days before to harvest. When applied as a postemergence directed spray, add 1 quart 80% active nonionic surfactant, approved for application, to growing crops per 100 gallons of spray. Direct sprays to the soil and the base of vines.
Postemergence	1 – 2 (0.25 - 0.5 lbs. a.i.)	

Tank Mixing:

- When applied as a directed postemergence spray using ground equipment, **BLASTWAVE 240 EC** may be applied in tank mix with paraquat or glyphosate in a minimum spray volume of 10 gallons per acre. Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply. It is the pesticide user's responsibility to ensure that all products are registered for intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Chemigation: Follow chemigation instructions in Product Use Information section.

- **Low Volume Sprinkler (Microsprinkler) and Drip (Trickle) Irrigation:** Apply only through low-volume sprinkler or drip systems designed to uniformly distribute irrigation water beneath the canopy. Meter **BLASTWAVE 240 EC** at a continuous rate during the middle 1/3 of the irrigation period and discontinue application during the final 1/3 of the irrigation period to ensure proper flushing of the irrigation system. Use of **BLASTWAVE 240 EC** through low-volume sprinklers or drip emitters helps to reduce the "ring effect" of weed escapes in areas around sprinklers or emitters where previously applied broadcast or directed treatments begin to break down.

Precautions:

- **Crop Tolerance:** The use of **BLASTWAVE 240 EC** may result in varying degrees of injury to non-dormant grapes. Grape foliage will typically exhibit injury symptoms from direct or indirect (spray drift, soil contact) exposure. This injury may result in necrosis, reddening, cupping or crinkling of grape leaves. The grape plant will continue to grow normally. Grape leaves that are immature or expanding at the time of contact with **BLASTWAVE 240 EC** are the most susceptible to foliage injury. Grapes may exhibit some small blemishes (spots or flicks) on the fruit.

Crop-Specific Use Restrictions:

- **DO NOT** apply more than 2 pints (0.5 lbs. a.i.) per acre in a single application.
- **DO NOT** apply more than 6 pints (1.5 lbs. a.i.) per acre per year as a result of multiple applications in any given area (broadcast, banded, or within the wetted area of the low-volume sprinkler or drip irrigation system).
- **BLASTWAVE 240 EC** is phytotoxic to plant foliage. Avoid drift to all other crops and nontarget areas. **DO NOT** apply when weather conditions favor drift.
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- **DO NOT** make follow up applications within 8 weeks of previous application.
- **DO NOT** apply within 14 days of harvest.
- **DO NOT** initiate application of **BLASTWAVE 240 EC** in non-dormant grapes until the completion of the bloom period.
- **DO NOT** apply to grapes established less than 3 years unless vines are either on a trellis wire a minimum of 3 feet above the soil surface, or protected by grow tubes.
- **BLASTWAVE 240 EC** must be applied only by ground application equipment or through low-volume sprinkler (micro sprinkler) or drip (trickle) irrigation systems.
- Apply **BLASTWAVE 240 EC** as a non-dormant application to wine grapes or raisin grapes only.

Key Weeds Controlled or Suppressed:

Preemergence		Postemergence	
burclover cheeseweed, malva fiddleneck, coast groundsel, common henbit knotweed, prostrate lambquarters, common minerslettuce	mustard, black nettle, burning nightshade, black pigweed, redroot purslane, common redmaids rocket, London sowthistle, annual	cheeseweed, malva fiddleneck, coast groundsel, common henbit minerslettuce morninggloory species, annual mustard, black	nettle, burning nightshade, black pigweed, redroot purslane, common redmaids rocket, London sowthistle, annual

SUCKER CONTROL IN NON-DORMANT GRAPES(Washington and Oregon Only)
(Grapes for Wine and Processing Only)

Application Timing for Sucker Control	Rate (pint/acre)	Specific Use Directions
Grape suckers less than 12 inches in length.	1 -2 (0.25 - 0.5 lbs. a.i.)	Apply BLASTWAVE 240 EC in a three-foot band directed towards to newly emerging suckers at the base of the grapevine. The highest rate and/or a second application may be required to achieve an acceptable level of control/suppression of grape suckers. Avoid spray contact on flowers, grape clusters, or fruit. Use mounted nozzles to deliver the spray solution. Thorough spray coverage of sucker growth is essential for optimal activity. Use a spray volume of 50 or more gallons per acre (broadcast basis).
<p>Tank Mixing: For enhanced postemergence sucker activity, a tank mixture of BLASTWAVE 240 EC with either glufosinate or paraquat can be used. Apply at the specified rates and growth stages in a manner described on the respective labels. Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply. It is the pesticide user's responsibility to ensure that all products are registered for intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.</p>		
<p>Precautions:</p> <ul style="list-style-type: none"> The use of BLASTWAVE 240 EC may result in varying degrees of injury to non-dormant grapes. Grape foliage will typically exhibit injury symptoms from direct or indirect (spray drift or soil contact) exposure. This injury may result in necrosis, reddening, cupping or crinkling of grape leaves. The grape plant will continue to grow normally. Leaves that are immature or expanding at the time of contact with BLASTWAVE 240 EC are the most susceptible to injury. Grape fruit may exhibit some small blemishes (spots or flecks) on the fruit. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> DO NOT apply more than 2 pints (0.5 lb. a.i.) of BLASTWAVE 240 EC broadcast per acre in a single application. DO NOT apply more than 6 pints (1.5 lbs. a.i.) per acre per year as a result of multiple applications in any give area (dormant and non-dormant; broadcast or banded). DO NOT make more than 4 applications per acre per year when using reduced application rates. DO NOT make follow up applications within 8 weeks of previous application. BLASTWAVE 240 EC must be applied only by ground application equipment. Apply BLASTWAVE 240 EC as a non-dormant application for sucker control only to wine or processed grapes. DO NOT apply BLASTWAVE 240 EC within 60 days of harvest. 		

GRASSES GROWN FOR SEED (Established Perennial)
For use Only in Oregon and Washington and Idaho

Weed Control	Rate (Pint/acre)	Specific Use Directions
Late preemergence to Early postemergence Fine fescues (Chewings, creeping red, and hard types)	0.5 (0.125 lbs. a.i.)	Make a single application of BLASTWAVE 240 EC at 0.5 pints (0.125 lbs. a.i.) per acre per year. The application must be applied before the weed seedlings to be controlled exceed the two-leaf growth stage (Use Period: September 1 to December 15).
Late preemergence to Early postemergence Kentucky bluegrass, tall fescue, orchardgrass, bentgrass, perennial ryegrass	0.5 – 1.5 (0.125 – 0.375 lbs. a.i.)	<p>Apply as a broadcast application in a minimum spray volume of 20 gallons of water per acre. Use conventional ground spray equipment with flat fan spray nozzles at a minimum spray pressure of 30 psi. Spray equipment must be calibrated prior to application. Select an application rate based on soil conditions, weed spectrum, weed stage of growth and/or desired period of residual weed control. The maximum rate of 1.5 pints (0.375 lbs. a.i.) of BLASTWAVE 240 EC may be split, however, the initial application must be applied before the weed (or volunteer grass) seedlings to be controlled exceed the 2-leaf growth stage and no later than December 15. The final application must be completed prior to January 15. A maximum of 1.5 pints (0.375 lbs. a.i.) of BLASTWAVE 240 EC (0.375 lb. a.i.) per acre may be applied per year.</p> <p>Early treatment is important for control of seedling grasses. Apply BLASTWAVE 240 EC at the onset of grass seed germination during the initial fall rains or fall sprinkler irrigation (late preemergence). Application at the 1-leaf growth stage (early postemergence) may provide somewhat better control of volunteer crop seedlings than application at the 2-leaf stage. Ample soil moisture soon after application is required for optimum performance against seedling grasses.</p> <p>BLASTWAVE 240 EC will not control established perennial grasses or seedlings of most annual and perennial grasses beyond the six-leaf stage of growth. Applications to seedling grass weeds between the 2- and 6-leaf stage may result in partial control but vary with weed species.</p> <p>Single applications made to seedlings between the 2- and 6-leaf growth stages will cause injury and stunting, but re-growth will usually occur. If seedlings have not died within 3 to 4 weeks after treatment and healthy green regrowth is visible, a second application may be needed.</p> <p>Surfactant - For improved control of emerged weed seedlings, an 80% active nonionic surfactant, approved for application to growing crops, may be added at a rate of 0.12% to 0.5% spray volume (1 to 4 pints per 100 gallons of spray)</p>

Precautions:

Crop Tolerance - The application of **BLASTWAVE 240 EC** to established perennial grass will result in a chlorosis (yellowing) within two weeks after treatment. These symptoms may be present for up to three months following application. The application of **BLASTWAVE 240 EC** may also result in a substantial reduction in vegetative growth of perennial grasses during the winter. Leaf chlorosis and reduction of vegetative growth is a typical and normal response, however, the seed yield from healthy, vigorous perennial grasses has not been affected by fall application of **BLASTWAVE 240 EC**. It is accepted by the grower that conditions under which seed yield may be reduced are not fully understood. Grazing may also magnify crop injury and reduce the seed yield.

Crop tolerance to **BLASTWAVE 240 EC** can be improved by limiting the amount of leaf tissue present on established perennial grasses at time of application by such methods as propane flaming, intensive mechanical clipping (crew cutting), or livestock grazing prior to application.

Tank mixtures and/or sequential applications of **BLASTWAVE 240 EC** with other herbicide products registered for use on grasses grown for seed may result in increased injury or stand loss. If a tank mixture is applied, applications must be made only to healthy, vigorous stands of perennial grasses. The decision to apply a tank mixture containing **BLASTWAVE 240 EC** is at the sole discretion of the grower and at the grower's risk.

Crop-Specific Restrictions:

- Chemigation: **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** exceed maximum spray pressure of 60 psi.
- **BLASTWAVE 240 EC** must be applied using ground equipment only.
- **DO NOT** apply more than 1.5 pints (0.375 lbs. a.i.) of **BLASTWAVE 240 EC** broadcast per acre in a single application.
- **DO NOT** apply more than one application per year to fine fescues.
- **DO NOT** make more than two applications per year to other grass varieties when using reduced application rates.
- **DO NOT** apply more than 1.5 pints (0.375 lbs. a.i.) of **BLASTWAVE 240 EC** (0.375 lb. a.i.) per acre per year.
- **DO NOT** apply **BLASTWAVE 240 EC** within 150 days of harvesting grass hay in Oregon or within 365 days of harvesting grass hay in Idaho and Washington.
- **DO NOT** graze fields that have been treated with **BLASTWAVE 240 EC** within 150 days of treatment in Oregon or within 365 days of treatment in Idaho and Washington as illegal residues may be present in the vegetative foliage.

Weeds Suppressed and/or Controlled

BLASTWAVE 240 EC will control or suppress the following weeds and volunteer crops when applied between the onset of germination and the two-leaf seedling growth stage:

Common Name	Scientific Name
Bentgrass	<i>Agrostis species</i>
Bluegrass, Annual	<i>Poa annua</i>
Bluegrass, Kentucky	<i>Poa pratensis</i>
Bluegrass, Roughstalk	<i>Poa trivialis</i>
Brome, California (mountain) †	<i>Bromus carinatus</i>
Fescue, Fine (creeping red and Chewings)	<i>Festuca rubra</i>
Fescue, Hard	<i>Festuca longifolia</i>

(continued)

Common Name	Scientific Name
Fescue, Rattail	<i>Vulpia myuros</i>
Fescue, Tall	<i>Festuca arundinacea</i>
Orchardgrass	<i>Dactylis Glomerata</i>
Ryegrass, Italian	<i>Lolium multiflorum</i>
Ryegrass, Perennial†	<i>Lolium perenne</i>

† These species are suppressed, but not fully controlled by **BLASTWAVE 240 EC**

GRASSES GROWN FOR SEED
(Fall Seeded New Plantings of Perennial Ryegrass and Tall Fescue)
For Use only in Oregon

Weed Control	Rate (fl. oz./Acre)	Specific Use Directions
Early postemergence	2 – 3 fl. oz. (0.03 – 0.05 lbs. a.i.)	<p>Use BLASTWAVE 240 EC for early postemergence suppression/control of various annual broadleaf weed seedlings in fall seeded perennial ryegrass or tall fescue that has at least 1 to 2 tillers. Applications to seedling plants that have not yet tillered, may result in severe crop injury or stand loss (plant death).</p> <p>Apply a single application of BLASTWAVE 240 EC either alone or tank mixed with ethofumesate. Some temporary crop injury may occur, but it is typically only a transient effect and should not adversely impact yield. Control from the BLASTWAVE 240 EC is primarily directed at emerged seedling broadleaf weeds including speedwell and groundsel, but control or suppression of other species is possible if tank mixed with ethofumesate.</p> <p>Apply as a broadcast application in a minimum spray volume of 20 gallons of water per acre. Use conventional ground spray equipment with flat fan spray nozzles at the manufacturer's specified spray pressure. Calibrate spray equipment before each use.</p> <p>Use of Surfactant: An 80 percent active nonionic surfactant approved for application to growing crops may be added at a rate of 0.12 to 0.5 percent spray volume for improved control of emerged seedlings.</p>
Precautions:		
<ul style="list-style-type: none"> • Crop Tolerance - The application of BLASTWAVE 240 EC to fall seeded perennial ryegrass and tall fescue (that have at least 1 to 2 tillers) will result in a chlorosis (yellowing) of the foliage within two weeks after treatment. Some symptoms may be present for up to three months following application. The use of BLASTWAVE 240 EC may also result in a substantial reduction in vegetative growth by perennial grasses during the winter. Leaf chlorosis and reduction of vegetative growth is a typical and normal response and seed yield of healthy, vigorous perennial grasses is typically not affected by fall application of BLASTWAVE 240 EC. It is accepted by the grower that conditions under which seed yield may be reduced are not fully understood and that a reduction in seed yield may occur. Grazing may also magnify crop injury and reduce the seed yield. • Overlaps (2X applications) may cause significant crop injury but not result in excessive stand losses if the crop plants are at least 1 to 2 tillers when the applications are made. 		

Precautions:

- Tank mixtures of **BLASTWAVE 240 EC** with ethofumesate may result in enhanced crop injury. If a tank mixture is to be applied, applications must be made only to healthy, vigorous stands of perennial grasses. The decision to apply a tank mixture containing oxyfluorfen herbicide is at the sole discretion of the grower and at the grower's risk.

Crop-Specific Restrictions:

- **DO NOT** apply to newly planted stands that are under stress from any cause as there is an enhanced opportunity for crop injury to occur.
- **Chemigation: DO NOT** apply this product through any type of irrigation system.
- **DO NOT** graze fields that have been treated with **BLASTWAVE 240 EC** as illegal residues may be present in the vegetative forage.
- **DO NOT** apply more than 3 fluid ounces (0.05 lbs. a.i.) of **BLASTWAVE 240 EC** broadcast per acre in a single application.
- **DO NOT** apply more than 3 fluid ounces (0.05 lbs. a.i.) of **BLASTWAVE 240 EC** per acre per year.
- **DO NOT** make more than two applications per year when using reduced application rates.
- **DO NOT** graze livestock in treated fields within 150 days of application.
- **DO NOT** apply within 150 days of harvest.
- **BLASTWAVE 240 EC** must be applied only by ground application equipment.

Weeds Suppressed and/or Controlled:

BLASTWAVE 240 EC will provide control or suppression of the following weeds and volunteer crops when applied between the onset of germination and the two-leaf seedling growth stage.

Common Name	Scientific Name
Groundsel, Common	<i>Senecio vulgaris</i>
Speedwell	<i>Veronica Spp</i>

GUAVA (Bearing and Non-bearing)

(For Use Only in Hawaii)

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	5 – 8 (1.25 – 2.0 lbs. a.i.)	Preemergence or Postemergence: In established guava plantings, apply preemergence or postemergence to weeds. Increase the spray volume to ensure adequate coverage in high densities of emerged weeds or heavy trash. Minimize contact with guava plants by directing the spray to the soil surface. Spray shields are suggested to minimize spray contact in young plantings.
Postemergence	2 – 8 (0.25 – 2.0 lbs. a.i.)	For broader spectrum postemergence control of grass and broadleaf weeds, BLASTWAVE 240 EC may be applied in tank mix combination with paraquat or glyphosate. Follow applicable use directions, precautions and limitations on the labels of the respective tank mix products. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Precautions:

- Prevent direct spray or drift from contacting green stems, fruit or foliage, as injury may result.
- Alone or in tank mix combination, **BLASTWAVE 240 EC** must be applied to only healthy growing trees.
- Application of **BLASTWAVE 240 EC** must be made only after new foliage growth has hardened off.

Crop-Specific Restrictions:

- **DO NOT** apply more than 8 pints (2.0 lbs. a.i.) per acre of **BLASTWAVE 240 EC** in a single application.
- **DO NOT** apply more than 16 pints (4.0 lbs. a.i.) per year.
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- **DO NOT** make follow up applications within 8 weeks of previous application.
- **DO NOT** apply **BLASTWAVE 240 EC** within 1 day of harvest.

Key Weeds Controlled:

Preemergence	Postemergence
ageratum buttonweed crotalaria purslane, common spurge, garden	purslane, common spurge, garden

HORSERADISH

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	2 (0.5 lbs. a.i.)	Apply BLASTWAVE 240 EC after the horseradish roots have been planted but prior to emergence of new horseradish leaves. Emerged leaves that receive direct or indirect spray (drift) contact will be injured. If necessary, cultivate before application to destroy germinated weeds.
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> • DO NOT apply more than 2 pints (0.5 lbs. a.i.) of BLASTWAVE 240 EC per acre per year. • DO NOT apply more than 2 pints (0.5 lbs. a.i.) per acre in a single application. • DO NOT make more than one application per year. • DO NOT apply within 60 days of harvest. • DO NOT apply BLASTWAVE 240 EC to horseradish plantings that have been weakened or stressed due to unfavorable temperature conditions, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture. 		

Key Weeds Controlled:

lambsquarters, common pigweed, redroot purslane, common	shepherdspurge smartweed, pennsylvania
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JOJOBA

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	4 – 6 (1.0 – 1.5 lbs. a.i.)	Initial application may be made when jojoba plants have reached a height of 6 inches or more. Use sufficient spray volume to ensure thorough coverage of dense weed growth. Direct sprays to the base of jojoba plants to avoid possible phytotoxicity to foliage. Spray shields are suggested for use in young plantings. Use higher rate in rate range for extended residual preemergence weed control. Make follow-up applications as necessary to maintain weed control. For early postemergence control of susceptible seedling weeds (less than 8 inches tall) apply BLASTWAVE 240 EC at the rate of 4 pints per acre (1.0 lbs. a.i.). BLASTWAVE 240 EC may be applied at the rate of 6 pints (1.5 lbs. a.i.) per acre for postemergence control of weeds up to 12 inches tall. For optimum residual control, apply during the fall or winter months. Control may be unsatisfactory for weeds greater than 12 inches tall.
Precautions:		
<ul style="list-style-type: none"> • Avoid direct spray or drift contact with jojoba flowers or buds as severe injury may result. • Over-the-top applications may cause burning, crinkling or bronzing of jojoba foliage, particularly to the youngest leaves, flowers, or buds present at the time of application. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> • DO NOT apply more than 6 pints (1.5 lbs. a.i.) per acre per year. • DO NOT apply more than 6 pints (1.5 lbs. a.i.) per acre in a single application. • DO NOT apply more than 2 applications per acre per year when using reduced application rates. • DO NOT make follow up applications within 8 weeks of previous application. • DO NOT apply within 30 days of harvest. 		

Key Weeds Controlled:

Preemergence		Postemergence	
burclover	lettuce, prickly	fiddleneck, coast	minerslettuce
fiddleneck, coast	mallow, little (malva, cheeseweed)	filaree, broadleaf ††	nettle, burning
filaree, broadleaf		filaree, redstem ††	pigweed, redroot †
filaree, redstem	pigweed, redroot	filaree, whitestem †	redmaids
filaree, whitestem	purslane, common	groundsel, common †	shepherdspurse
groundsel, common	redmaids	henbit	sowthistle, annual
henbit	rocket, London	mallow, little (malva, cheeseweed)	
knotweed, prostrate	shepherdspurse		
lambsquarters, common	sowthistle, annual		

† Highest rate may be required for acceptable postemergence control.

†† **BLASTWAVE 240 EC** at the 6-pint (1.5 lbs. a.i.) rate will provide control of filaree not exceeding the 4-inch stage. Applications to filaree beyond the 4-inch stage may result in partial control.

MINT (SPEARMINT AND PEPPERMINT TOPS)

Mint (Spearmint and Peppermint Tops) Grown on Mineral Soils		
Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	4 – 6 (1.0 – 1.5 lbs. a.i.)	Oregon and Washington (East of Cascades), California, Montana, Idaho, Nevada, South Dakota and Utah: Apply from December through March when mint is dormant. When used postemergence (to weeds), add an 80% active ingredient nonionic surfactant at the rate of one quart per 100 gallons of spray volume and apply before weeds exceed a height of 4 inches. Late winter applications will provide maximum activity on summer weeds, but summer grass control may be inconsistent. For best results, fall-plowed fields must be harrowed to provide a smooth surface for application. In furrow-irrigated fields, corrugating must be done prior to application. Corrugating or harrowing will result in disturbance of treated soil or movement of untreated soil into treated areas, resulting in poor weed control.
Preemergence	2 – 3 (0.5 – 0.75 lbs. a.i.)	Peppermint Tops (Western Oregon Willamette Valley): Apply BLASTWAVE 240 EC from November through February to dormant peppermint only. Treatments in January or February provide better residual preemergence control of annual broadleaf weeds. Full season weed control must not be expected from this treatment.
<p>Precautions:</p> <ul style="list-style-type: none"> Application must be made prior to emergence of new spring growth or severe crop injury may result. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> DO NOT make more than one application of BLASTWAVE 240 EC per year. DO NOT apply more than 6 pints (1.5 lbs. a.i.) per acre in a single application. DO NOT apply more than 6 pints (1.5 lbs. a.i.) per acre per year. DO NOT apply within 30 days of harvest. Apply BLASTWAVE 240 EC only to healthy stands of spearmint and peppermint tops. DO NOT apply to spearmint or peppermint tops weakened by disease, drought, flooding, excessive fertilizer, soil salts, previously applied pesticides, nematodes, insects, or winter injury, as severe injury may result. In the Willamette valley, DO NOT apply BLASTWAVE 240 EC to mint that has been plowed. 		

Key Weeds Controlled:

bedstraw, catchweed † bluegrass, annual flixweed goundsel, common lambsquarter, common lettuce, prickly (china lettuce) mustard, blue (purple mustard) mustard, tumble (Jim hill mustard) nightshade, hairy	† oats, wild orach, red pepperweed, yellowflower pigweed, redroot † ryegrass, Italian shepherdspurse sowthistle, annual tansymustard thistle, Russian
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† Control of annual grasses is best obtained when **BLASTWAVE 240 EC** is applied prior to emergence. Postemergence control of winter annual grasses is unsatisfactory if applications are made after the 1 to 2-leaf stage.

Mint (Spearmint and Peppermint Tops) Grown on Muck Soils: For Use Only on Mint Grown in Indiana, Michigan, Montana, North Dakota, South Dakota, and Wisconsin		
Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	4 – 6 (1.0 – 1.5 lbs. a.i.)	Note: Use directions in this section apply only to spearmint and peppermint grown on muck soils (organic matter content of 20% or greater). When used postemergence (to weeds), add an 80% active ingredient nonionic surfactant at the rate of one quart per 100 gallons of spray volume and apply before weeds exceed a height of 4 inches.
Precautions:		
<ul style="list-style-type: none"> • Application must be made prior to emergence of new spring growth or severe crop injury may result. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> • DO NOT make more than one application of BLASTWAVE 240 EC per year. • DO NOT apply more than 6 pints (1.5 lbs. a.i.) per acre in a single application. • DO NOT apply more than 6 pints (1.5 lbs. a.i.) per acre per year. • DO NOT apply within 180 days of harvest. • To avoid excessive crop injury, DO NOT apply within 4 days of planting (sprigging) spearmint or peppermint. • Apply BLASTWAVE 240 EC only to healthy spearmint or peppermint tops. DO NOT apply to spearmint or peppermint tops that has been weakened by disease, nematodes, soil insects, or winter injury, as severe injury may result. 		

Key Weeds Controlled:

knotweed, prostrate
pigweed, redroot
purslane, common

NON-CROP USE

(Non-Food-Producing, Non-Cultivated Agricultural or Non-Agricultural Areas, including Highway and Utility Rights-of-Way, Industrial Sites, Tank Farms, Storage Areas, Airports, Fencerows, and Farmsteads)

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	5 – 8 (1.25 – 2.0 lbs a.i.)	Preemergence: Use higher rate in rate range for longer residual control.
Postemergence	2 – 8 (0.5 – 2.0 lbs a.i.)	Postemergence: Use the lower rate in the rate range for control of susceptible weeds in the early postemergence stage, less than 4 inches tall. Use the higher rate for weeds up to 12 inches tall. Application to weeds beyond the 4-inch stage may result in partial control.
<p>Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply. It is the pesticide user's responsibility to ensure that all products are registered for intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.</p> <ul style="list-style-type: none"> • Preemergence: For broader-spectrum residual preemergence weed control, BLASTWAVE 240 EC may be applied in tank mix combination with diuron or simazine. • Postemergence: For additional postemergence control of susceptible grass and broadleaf weeds, BLASTWAVE 240 EC may be applied in tank mix combination with paraquat or glyphosate. 		

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Site-Specific Restrictions:

- **DO NOT** feed or allow animals to graze on any areas treated with **BLASTWAVE 240 EC**.
- **DO NOT** apply more than 16 pints (4.0 lbs. a.i.) per acre per year.
- **DO NOT** apply more than 8 pints (2.0 lbs. a.i.) per acre in a single application.
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- **DO NOT** make follow up applications within 8 weeks of previous application.

Key Weeds Controlled:

Preemergence		Postemergence	
burclover	lambsquarters, common	cheeseweed (malva)	nettle, burning
cheeseweed (malva)	lettuce, prickly	fiddleneck, coast	pigweed, redroot
fiddleneck, coast	pigweed, redroot	filaree, broadleaf	purslane, common
filaree, broadleaf	purslane, common	filaree, redstem	redmaids
filaree, redstem	redmaids	groundsel, common	shepherdspurse
groundsel, common	rocket, London	henbit	sowthistle, annual
henbit	shepherdspurse	minerslettuce	
knotweed, prostrate	sowthistle, annual		

ONIONS

Cultural Considerations: For maximum preemergence activity, the soil surface must be smooth and free of excessive trash (clippings, plant residues, etc.). Following application, cultural practices that result in redistribution or disturbance of the soil surface or move untreated soil into treated areas will reduce weed control. For best results, make applications to established beds that are left undisturbed during the time period for which weed control is desired.

Direct Seeded Onions: Postemergence Application		
Weed Control	Rate/Acre	Specific Use Directions
Postemergence	2 - 4 fl oz (0.03 – 0.06 lbs. a.i.)	Northeastern States Including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Apply BLASTWAVE 240 EC at 2 to 4 fl oz (0.03 – 0.06 lbs. a.i.) per acre to seeded onions that have at least 3 true leaves using ground equipment. Multiple treatments at 2 to 4 fl oz (0.03 – 0.06 lbs. a.i.) per acre may be applied up to a maximum of 2 pints (32 fl oz) (0.5 lbs. a.i.) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing.
Postemergence	0.5 - 1 pint (0.125 – 0.25 lbs. a.i.)	Western States Including Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah and Washington: Apply BLASTWAVE 240 EC at 0.5 to 1 pints (0.125 – 0.25 lbs. a.i.) per acre to seeded onions that have at least 2 true leaves using ground equipment. Multiple treatments at 0.5 to 1 pints (0.125 – 0.25 lbs. a.i.) per acre may be applied up to a maximum of 2.5 pints (0.625 lbs. a.i.) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing.

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Direct Seeded Onions: Postemergence Application		
Weed Control	Rate/Acre	Specific Use Directions
Postemergence	0.5 pint	All Other States: Apply BLASTWAVE 240 EC at 0.5 pints per acre to seeded onions that have at least 2 true leaves using ground equipment. Multiple treatments at 0.5 pints (0.125 lbs. a.i.) per acre may be applied up to a maximum of 2 pints (0.5 lbs. a.i.) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing.
Postemergence	(see above)	Sprinkler Irrigation - All Except Northeastern States (Center Pivot, Portable Lateral or Solid Set): Apply BLASTWAVE 240 EC at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.

Transplanted Onions: Application Immediately before Planting		
Weed Control	Rate (per/acre)	Specific Use Directions
Preemergence Postemergence	1 – 2 pint (0.25 - 0.5 lbs. a.i.)	Pre-transplant Application (Not for Use in Northeastern States or Western States: BLASTWAVE 240 EC may be applied as a broadcast or band application after completion of tillage operations, but before transplanting of onion plants. Transplanting must be accomplished with a minimum of soil disturbance and, for optimum weed control, soil surfaces must be left undisturbed after transplanting for the period for which weed control is desired. However, timely cultivation after weed emergence will assist in weed control. If less than 2 pints per acre was applied as a pre-transplant application, postemergence applications may be made as instructed for seeded onions.

Transplanted Onions: Application Immediately after Planting		
Application Timing for Target Weeds	Rate (per/acre)	Specific Use Directions
Preemergence	up to 2 pints (0.5 lbs. a.i.)	All States Except Northeastern States: Transplanted onions are most tolerant of a postemergence application immediately after transplanting. An application of up to 2 pints (0.5 lbs. a.i.) per acre may be made within two days after transplanting. If less than 2 pints (0.5 lbs. a.i.) per acre is applied, a second application can be made two weeks or more after transplanting.
	2 - 4 fl oz (0.003 – 0.006 lbs. a.i.)	Northeastern States including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Multiple treatments at 2 to 4 fl oz (0.003 – 0.006 lbs. a.i.) per acre may be applied up to a maximum of 2 pints (32 fl oz) (0.5 lbs. a.i.) per acre per year.

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Onions - Use Precautions (Applicable to All Areas and Methods of Application):

- **BLASTWAVE 240 EC** can cause necrotic lesions, twisting, pigtailling or stunting of the onion plants. Injury will be more severe if applications are made immediately following or during cool, wet weather and/or if applications are made prior to the specified onion growth stage of the onion plants as specified in Specific Use Directions.
- For Arizona, California, Idaho, Oregon, New Mexico, Nevada, Utah and Washington only, tank mixtures of **BLASTWAVE 240 EC** with oils, surfactants, liquid fertilizers or other pesticides may be made but could result in unexpected results including enhanced crop response or injury.

Onions - Crop-Specific Restrictions (Applicable to All Areas and Methods of Application):

- In all states except Northeastern states, **DO NOT** apply until direct seeded onion plants have at least two (2) fully developed true leaves. In the Northeastern states, **DO NOT** apply until direct seeded onion plants have at least three (3) fully developed true leaves. Application made prior to the specified growth stage may result in serious crop injury.
- **DO NOT** apply more than 2 pints (0.5 lbs. a.i.) of **BLASTWAVE 240 EC** broadcast per acre in a single application
- **DO NOT** apply more than a total of 2 pints (0.5 lbs. a.i.) per acre of **BLASTWAVE 240 EC** per year as a result of multiple applications.
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- **DO NOT** make follow up applications within 8 weeks of previous application.
- **DO NOT** apply within 45 days of harvest.
- **DO NOT** apply **BLASTWAVE 240 EC** as a preemergence treatment to direct seeded onions.
- Use only on dry bulb onions.
- **DO NOT** apply to onions grown for seed, except as instructed in separate use directions.
- See the Inherent Risks of Use section of the Terms and Conditions of Use at the end of the label for more information.
- **DO NOT** apply to onion plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, storage conditions, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects, nematodes or diseases.

Key Weeds Controlled:

Postemergence

canarygrass (annual)
eveningprimrose, cutleaf (a)
groundsel, common
mallow, little (malva)
nightshade, black
pigweed, prostrate (b)
pigweed, redroot (a, b)
puncturevine
purslane, common (a, b)
rocket, London

(continued)

Postemergence

sage, lanceleaf
shepherdspurse^(b)
sowthistle, annual

^(a)Weeds controlled when applied as a pre-transplant application. In addition, **BLASTWAVE 240 EC** at the rate of 1 to 2 pints (0.5 lbs. a.i.) per acre will provide control/suppression of carpetweed, Pennsylvania smartweed, galinsoga, common lambsquarters, and wild mustard. Applications of **BLASTWAVE 240 EC** to muck soils may result in partial control or suppression of the weeds listed.

^(b)Specific weeds controlled at rates specified for use in northeastern states (see DOSAGE section).

ONIONS GROWN FOR SEED

Weed Control	Rate (per/acre)	Specific Use Directions
Preemergence	2 fl oz (0.003 lbs. a.i.)	Northeastern States including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Multiple treatments at 2 fl oz (0.003 lbs. a.i.) per acre may be applied up to a maximum of 2 pints (32 fl oz) (0.5 lbs. a.i.) per acre pre year. Prior to initial treatment, seeded onions must have at least four (4) true leaves. Multiple treatments at the aforementioned rate may be applied.
Preemergence	up to 0.5 pints (0.125 lbs. a.i.)	All other States: Apply BLASTWAVE 240 EC at up to 0.5 pints (0.125 lbs. a.i.) per acre to seeded onions that have at least three (3) true leaves. Multiple treatments at 0.5 pints (0.125 lbs. a.i.) per acre may be applied up to a maximum of 2 pints (0.5 lbs. a.i.) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing. Sprinkler Irrigation - Portable Lateral or Solid Set: Apply BLASTWAVE 240 EC at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.

Use Precautions:

- **Notice:** Some varieties or inbred lines of onions may be more susceptible to **BLASTWAVE 240 EC**. Care must be taken to ensure that the particular onion variety or line being grown is tolerant to **BLASTWAVE 240 EC**. It is suggested that all onion varieties or lines be tested in limited areas to ensure an adequate level of crop tolerance prior to an application for postemergence weed control.
- **BLASTWAVE 240 EC** can cause necrotic lesions, twisting, pigtailing or stunting of the onion plants. Injury will be more severe if applications are made immediately following or during cool, wet weather and/or if applications are made prior to the specified onion growth stage of the onion plants as specified in Specific Use Directions.

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Crop-Specific Restrictions:

- In all states, **DO NOT** apply **BLASTWAVE 240 EC** until the onions have reached the minimum leaf stage specified. Application prior to the specified stage of development may result in serious injury.
- **DO NOT** apply more than 0.5 pints (1.0 lbs. a.i.) of **BLASTWAVE 240 EC** broadcast per acre in a single application.
- **DO NOT** apply more than a total of 1 pint (0.25 lbs. a.i.) per acre of **BLASTWAVE 240 EC** during one year.
- **DO NOT** make more than 2 applications per acre per year.
- **DO NOT** make follow up applications within 8 weeks of previous application.
- **DO NOT** apply within 60 days of harvest.
- For seeded onions, **DO NOT** apply **BLASTWAVE 240 EC** with oils, surfactants, liquid fertilizers or other pesticides.
- **DO NOT** apply to onion plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects or diseases.

Key Weeds Controlled:

	Postemergence
canarygrass (annual) eveningprimrose, cutleaf groundsel, common mallow, little (malva) nighthshade, black pigweed, prostrate † pigweed, redroot †	puncturevine purslane, common † rocket, London sage, lanceleaf shepherdspurse sowthistle, annual

† Specific weeds controlled at rates specified for use in northeastern states (see DOSAGE section).

PAPAYA (Hawaii Only)

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	4 (1.0 lbs. a.i.)	The initial application must occur no sooner than 4 months after transplanting or 6 months after direct seeding, and after the papaya has reached a minimum height of 4 feet. Applications may be repeated at approximate 4-month intervals. Apply preemergence or postemergence to weeds. Increase the spray volume to assure adequate coverage of dense growth of emerged weeds. BLASTWAVE 240 EC must be applied as a directed spray to the orchard floor beneath the papaya plants. Accurate, uniform placement of BLASTWAVE 240 EC is essential for effective weed control and to minimize crop injury. BLASTWAVE 240 EC must be applied using rigid precision ground sprayer equipment. Postemergence applications may be made up to the 4 leaf stage of weed growth.
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> • DO NOT apply more than 4 pints (1.0 lbs. a.i.) of BLASTWAVE 240 EC broadcast per acre in a single directed spray. • DO NOT apply more than 12 pints (3.0 lbs. a.i.) broadcast per acre per year as a result of multiple applications. 		

Crop-Specific Restrictions:

- **DO NOT** make more than 3 applications per acre per year.
- **DO NOT** make follow up applications within 8 weeks of previous application.
- **DO NOT** apply **BLASTWAVE 240 EC** within 1 day of harvest.
- **DO NOT** allow the herbicide solution, spray, drift or mist to contact green bark, stems, fruit or foliage as injury may result.
- **DO NOT** use **BLASTWAVE 240 EC** on papaya plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.

Key Weeds Controlled:

amaranth, spiny purslane, common	spurge, garden
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ROSES: FIELD-GROWN, ESTABLISHED PLANTINGS
(For Distribution and Use Only in the State of California)

BLASTWAVE 240 EC may be used as a post-directed application for control of certain broadleaf weeds in well-established rose plantings after bud grafted canes are at least 18-inches in length.

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	2 to 4 pints (0.5 – 1.0 lbs. a.i.)	For optimum preemergence weed control, the soil surface must be smooth and free of excessive trash (clippings, plant residues, etc.). Following application, cultural practices which result in redistribution or disturbance of the soil surface or result in the movement of untreated soil into treated areas will reduce the effectiveness of weed control.
Postemergence	2 to 4 pints (0.5 – 1.0 lbs. a.i.)	The lower rate is specified for the control of susceptible seedling weeds in the early postemergence stage, before the 4-leaf growth stage. The higher rate is advised for weeds at the 4-leaf growth stage. The addition of a labeled rate of a herbicide adjuvant may assist in spray coverage and postemergence activity. Applications to weeds beyond the 4-leaf growth stage may result in partial control.

Precautions:

- Apply in 25 to 40 gallons of water per broadcast acre. Use a low-pressure sprayer with nozzles directed at the base of rose plants. Use spray shields to avoid spray contact with rose foliage. To minimize spray drift, use the lowest spray pressure suitable for the application equipment.
- **BLASTWAVE 240 EC** must be applied only to roses with canes that are 18 inches or longer. Applications to rose plants with canes less than 18 inches in length may result in severe crop injury. Spray contact with foliage may cause severe crop injury and must be avoided. Leaves that are contacted by the spray will exhibit necrotic spotting and may drop from plant. Splashing rain or irrigation water or excessive soil moisture after application may result in leaf cupping, crinkling, stunting or defoliation.
- **BLASTWAVE 240 EC** is phytotoxic to plant foliage. Avoid drift to nontarget areas. **DO NOT** apply when weather conditions favor drift.
- When applied as directed, field-grown roses are resistant to **BLASTWAVE 240 EC**, but this has not been evaluated on all varieties, biotypes and cultivars of roses under all possible growing conditions. The user must exercise caution with this product. Until familiar with results under current growing conditions, limit application of this product to a few plants in a small area to-determine plant tolerance and potential for injury before initiating large-scale applications.
- Tank mixtures of **BLASTWAVE 240 EC** with oils, liquid fertilizers or other pesticides may increase the potential for crop injury and are the responsibility of the user.

Use Restrictions:

- **DO NOT** apply more than 4 pints (1.0 lbs. a.i.) of **BLASTWAVE 240 EC** per acre in a single application.
- **DO NOT** apply more than 8 pints (2.0 lbs. a.i.) per acre per year.
- **DO NOT** make more than 2 applications per acre per year.
- **DO NOT** make follow up applications within 8 weeks of previous application.
- **DO NOT** apply **BLASTWAVE 240 EC** in enclosed greenhouse or lathouse structures.
- **DO NOT** feed or graze animals on areas treated with **BLASTWAVE 240 EC**.
- **BLASTWAVE 240 EC** is phytotoxic to plant foliage. **DO NOT** apply when weather conditions favor drift to non-target areas.
- **DO NOT** apply **BLASTWAVE 240 EC** to rose plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.
- **DO NOT** apply this product to roses through any type of irrigation system.

Weeds Controlled

Pre-emergence	Postemergence:
Little mallow (cheeseweed; <i>Malva parviflora</i>) Field bindweed (annual morningglory; <i>Convolvulus arvensis</i>) Morningglory, ivyleaf (<i>Ipomoea hederacea</i>) Nightshade, black (<i>Solanum nigrum</i>) Nightshade, hairy (<i>Solanum physalifolium</i>) Nodding beggarticks (<i>Bidens spp.</i>) Redroot pigweed (<i>Amaranthus retroflexus</i>)	Little mallow (cheeseweed; <i>Malva parviflora</i>) Field bindweed (annual morningglory; <i>Convolvulus arvensis</i>) Morningglory, ivyleaf (<i>Ipomoea hederacea</i>) Nightshade, black (<i>Solanum nigrum</i>) Nightshade, hairy (<i>Solanum physalifolium</i>) Redroot pigweed (<i>Amaranthus retroflexus</i>)

SOYBEANS

(Not for Use in California)

SOYBEANS – EARLY PREPLANT APPLICATION IN CONSERVATION TILLAGE SYSTEMS		
Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	1.5 – 3 (0.375 – 0.75 lbs. a.i.)	<p>Early Preplant Application: Surface apply BLASTWAVE 240 EC to the stale seedbed approximately 14 days before planting conservation tillage soybeans for postemergence and preemergence residual broadleaf control. Use a spray volume of 20 or more gallons per acre and increase the spray volume if growth of existing weed is dense. BLASTWAVE 240 EC at 2 to 3 pints provides early season suppression of annual grasses, but must not be relied upon as a basic grass herbicide. A planned program utilizing herbicides registered for early preplant, preemergence or postemergence grass control in soybeans is necessary.</p> <p>Use of ridge or slot planter or a similar planting implement that causes minimal soil disturbance is advised. Movement or redistribution of surface soil will reduce herbicidal effectiveness.</p>

SOYBEANS: NO-TILL (Double-Crop)		
Application Timing For Target Weeds	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	0.5 – 2 (0.125 - 0.5 lbs. a.i.)	Preemergence Application to Soybeans: Applied preemergence, BLASTWAVE 240 EC provides postemergence and residual preemergence control of susceptible broadleaf weeds. Apply BLASTWAVE 240 EC within one day after planting. Later applications may result in severe crop injury. Apply in a minimum spray volume of 20 gallons per acre and increase spray volume if growth of existing weeds is dense.
Tank Mixing: For enhanced postemergence control of existing grass and broadleaf weeds, BLASTWAVE 240 EC may be tank mixed with paraquat or glyphosate. For extended residual control of annual grassed no-till soybeans, BLASTWAVE 240 EC may also be tank mixed with a residual grass herbicide. It is the pesticide user's responsibility to ensure that all products are registered for intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.		
SOYBEANS: NO-TILL (Double-Crop)		
Application Timing For Target Weeds	Rate (pint/acre)	Specific Use Directions
Postemergence	1 (0.25 lbs. a.i.)	Postemergence Directed Application: BLASTWAVE 240 EC may be applied as a post-directed application. Optimum control is achieved when BLASTWAVE 240 EC is applied to seedling weeds not exceeding 4 true leaves (not counting cotyledon leaves) and actively growing. Use of an 80% activenonionic surfactant approved for application to growing crops at the rate of 2 pints per 100 gallons of spray is required whenever postemergence weed control is desired. For Postemergence application, Soybeans must be a minimum 8 inches tall. Use a minimum of 2 flat fan nozzles per row. Use branch lifters or shields to prevent excessive spray contact to the soybean plants. DO NOT use hollow cone nozzles.

Soybeans: Grown Under Conventional Tillage Systems		
Application Timing For Target Weeds	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	1 – 1.5 (0.25 – 0.375 lbs. a.i.)	Preemergence Application to Soybeans: BLASTWAVE 240 EC provides preemergence control of susceptible broadleaf weeds. Apply BLASTWAVE 240 EC within one day after planting. Later applications may result in severe crop injury. Apply in a minimum spray volume of 20 gallons per acre and increase spray volume if growth of existing weeds is dense. The 1.5 pints (0.375 lbs. a.i.) per acre rate will assist in early season annual grass control but must not be relied upon as a basic grass herbicide. BLASTWAVE 240 EC may also be applied as a preemergence application following a preplant incorporated grass herbicide treatment.

<p>Preemergence Tank Mixes (To Control Additional Grass and Broadleaf Weeds): Apply preemergence tank mixes of BLASTWAVE 240 EC within one day after planting. Later applications may result in severe crop injury. It is the pesticide user's responsibility to ensure that all products are registered for intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.</p> <ul style="list-style-type: none"> • BLASTWAVE 240 EC at 0.6 to 1.5 pints (0.15 - 0.375 lbs. a.i.) per acre may be applied preemergence to soybeans in tank mix with Dual Magnum Herbicide or Lasso Herbicide. BLASTWAVE 240 EC may be applied alone as a preemergence application following a preplant incorporated grass herbicide application or as a tank mix in a preemergence application with herbicides. Refer to the label of tank mix product for additional weeds controlled. • BLASTWAVE 240 EC at 0.6 to 0.8 pints (0.15 – 0.2 lbs. a.i.) per acre may be applied preemergence to soybeans in tank mix with clomazone 		
Postemergence	1 (0.25 lbs. a.i.)	<p>Postemergence Directed Sprays: BLASTWAVE 240 EC may be applied as a post-directed application at 1 pint (0.25 lbs. a.i.) per acre. Optimum control is achieved when weeds DO NOT exceed 4 true leaves and are actively growing (DO NOT count cotyledon leaves). Use of an 80% active nonionic surfactant approved for application to growing crops at the rate of 2 pints (0.5 lbs. a.i.) per 100 gallons of spray is required whenever postemergence weed control is desired. For postemergence application, Soybeans must be a minimum 8 inches tall. Use a minimum of 2 flat fan nozzles per row. Use branch lifters or shields to prevent excessive spray contact to the soybean plants. DO NOT use hollow cone nozzles.</p>
<p>Postemergence Tank Mixes: For broader spectrum control or broadleaf weeds, BLASTWAVE 240 EC may be applied in tank mix with 2,4-DB herbicide. Use 1 pint of BLASTWAVE 240 EC with specified rate of 2,4-DB per acre. Refer to label of tank mix product for additional weeds controlled.</p> <p>It is the pesticide user's responsibility to ensure that all products are registered for intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.</p>		
<p>Precautions (All Methods and Timings to Soybeans):</p> <ul style="list-style-type: none"> • Soybeans are tolerant to preemergence and post-directed applications of BLASTWAVE 240 EC at specified rates, however, under certain conditions injury may occur. Heavy splashing rain shortly after crop emergence or cold, wet soil conditions during early growth stages can cause leaf cupping and crinkling. When injury occurs, it is limited to the first few leaves that develop after crop emergence. Soybeans recover from this injury and yields are not adversely affected. Soybeans accidentally sprayed during a post-directed application will exhibit necrotic spotting and injury to the soybean plant. Exercise care to avoid spray contact with the soybean leaves. • Tank Mixing: Read and observe all label directions before using. Follow applicable use directions, precautions and limitations on the labels of the respective tank mix products. Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on respective product labels. In interpreting the labels of tank mixed products, the most restrictive limitations must apply. It is the pesticide user's responsibility to ensure that all products are registered for intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. 		

Soybeans – Crop-Specific Restrictions:

- **DO NOT** apply more than 3 pints (0.75 lbs. a.i.) of **BLASTWAVE 240 EC** per acre in a single application
- **DO NOT** make more than two applications of **BLASTWAVE 240 EC** per acre per year.
- **DO NOT** make follow up applications within 8 weeks of previous application
- **DO NOT** apply more than 2 pints (0.5 lbs. active) of **BLASTWAVE 240 EC** per acre per year as a result of preemergence application in no-till (double-crop) or conventional till soybeans, or post-directed in conventional till soybeans.
- **DO NOT** apply more than 3 pints (0.75 lb active) of **BLASTWAVE 240 EC** per acre per year.
- **DO NOT** apply a post-directed application of **BLASTWAVE 240 EC** to soybeans after the initial appearance of blooms.

Key Weeds Controlled (BLASTWAVE 240 EC Alone):

Preemergence	Postemergence	
groundcherry, cutleaf † jimsonweed lambsquarters, common nightshade, American black † pigweed, redroot poinsettia, wild shepherdspurse sida, prickly (teaweed) smartweed, Pennsylvania sowthistle, common † velvetleaf	cocklebur, common croton, tropic groundcherry, cutleaf groundcherry, Wright jimsonweed lambsquarters, common morningglory, annual (up to 6 leaf) mustard, wild nightshade, American black nightshade, black	nightshade, hairy pigweed, redroot † poinsettia, wild purslane, common sesbania, hemp shepherdspurse sicklepod †† sida, prickly (teaweed) † smartweed, Pennsylvania velvetleaf

† Multiple applications may be required for acceptable control.

†† Post-directed applications of **BLASTWAVE 240 EC** will kill or suppress seedlings not exceeding the one true leaf stage.

TARO
(For Use Only in Hawaii)

For use only to dryland taro grown in Hawaii. Dryland taro is defined as taro grown without irrigation, or by using irrigation practices that **DO NOT** result in run-off, irrigation return flow, or other loss of irrigation water from the production area. If irrigation is used, the water applied shall not exceed the field capacity of the soil.

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	2 (0.5 lbs. a.i.)	Preemergence to Taro and Weeds: A single application of BLASTWAVE 240 EC at the rate of 2 pints (0.5 lbs. a.i.) per acre may be applied within 1 week after transplanting but prior to emergence of taro plants.
Postemergence	1	Postemergence to Taro and Weeds: BLASTWAVE 240 EC may be applied as a post-directed or band application at the rate of 1 pint (0.25 lbs. a.i.) per acre. Effective control of succulent weed seedlings in the 2-to 3-leaf stage can usually be obtained. Applications to weeds beyond the 3-leaf stage may result in partial control.

(continued)

Precautions:

- Accurate, uniform placement of **BLASTWAVE 240 EC** is essential for effective weed control and to minimize crop injury. Taro foliage receiving accidental spray or drift will be injured. **BLASTWAVE 240 EC** must be applied using rigid precision ground sprayer equipment.
- Occasionally, after the use of **BLASTWAVE 240 EC**, spotting, crinkling or flecking may appear on the leaves of the taro. Leaves that receive direct or indirect (drift) spray contact will be injured.

Crop-Specific Restrictions:

- **DO NOT** apply more than 2 pints (0.5 lbs. a.i.) of **BLASTWAVE 240 EC** broadcast per acre as a single preemergence application.
- **DO NOT** apply more than 1 pint (0.25 lbs. a.i.) of **BLASTWAVE 240 EC** per acre in a single post-direct spray or more than 2 pints (0.5 lbs. a.i.) per acre per year as a result of multiple post-directed applications.
- **DO NOT** make more than 2 applications per acre per year when using reduced application rates.
- **DO NOT** make follow up applications within 10 weeks of previous application.
- **DO NOT** apply more than 4 pints (1.0 lbs. a.i.) of **BLASTWAVE 240 EC** per acre per year as a result of preemergence and post-direct applications.
- **DO NOT** apply **BLASTWAVE 240 EC** within 6 months of harvest of taro (corms, leaves).
- **DO NOT** use **BLASTWAVE 240 EC** on taro plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.

Key Weeds Controlled:

amaranth, spiny
purslane, common
spurge, garden

TREE FRUIT/NUT/VINE CROPS**TREE NUTS, GROUP 14**

(Dormant Application)

Almond, Apple, Apricot, Avocado, Beechnut, Brazil Nut, Butternut, Cashew, Cherry, Chestnut, Chinquapin, Crab Apple, Date, Feijoa, Fig, Filbert, Grapes, Hickory Nut, Kiwi, Loquat, Macadamia Nut, Mayhaws, Nectarine, Olives, Peach, Pear, Pecan, Persimmon, Pistachio, Plum, Pomegranates, Prune, Quince, and Walnut

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence		
(broadcast application)	5 – 6 (1.25 – 1.5 lbs. a.i.)	Apply BLASTWAVE 240 EC with a minimum of 20 gallons of water per acre. Use higher spray volumes to ensure thorough coverage in high densities of emerged weeds or heavy trash. Sprays must be directed to the soil and the base of dormant trees or vines.
(banded application)	5 – 8 (1.25 – 2.0 lbs. a.i.)	In California, BLASTWAVE 240 EC may be applied as an over-the-top or directed spray to dormant nonbearing grape plantings. The use of a low-pressure sprayer is suggested. DO NOT apply over-the-top to grape plantings that are under stress due to drought, flooding, excessive fertilizer or soil salts, storage conditions, wind injury, hail, injury from previously applied pesticides, or injury due to insects, nematodes, or diseases, as severe crop injury may result.

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Postemergence (broadcast application) (banded application)	2 – 6 (0.5 – 1.5 lbs. a.i.) 2 – 8 (0.5 – 2.0 lbs. a.i.)	Apply in a spray volume of 40 or more gallons per acre. For optimum control, apply when weeds are at seedling stage of growth. The lower rate in the rate range (2 pints (0.5 lbs. a.i.) per acre) is required for the control of susceptible seedling weeds in the early postemergence stage up to the 4-leaf stage. Higher rates (up to 6 pints (1.5 lbs. a.i.) per acre) may be used for weeds up to the 6-leaf stage. Applications to weeds beyond the 6-leaf stage may result in partial control.
<p>Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply. See labels of tank mix partners to determine suitability and use rates for various crops.</p>		
<p>Postemergence: For broader spectrum postemergence control of listed grass and broadleaf weeds, BLASTWAVE 240 EC may be applied in tank mix with paraquat or glyphosate</p>		
<p>Preemergence: For broad-spectrum preemergence control of susceptible grass and broadleaf weeds in listed tree fruit, nut or vine plantings, BLASTWAVE 240 EC may be applied in tank mix with napropamide. BLASTWAVE 240 EC may also be applied in a preemergence tank mix with paraquat or glyphosate for enhanced control of existing weeds.</p>		
<p>Chemigation (All States): For dormant season application using sprinkler (low-volume (micro sprinkler), drip (trickle), and flood (basin) irrigation systems, apply BLASTWAVE 240 EC at the specified rate per acre. Follow applicable directions in the Chemigation section of this label when making applications using irrigation systems.</p>		
<p>Precautions:</p> <ul style="list-style-type: none"> • BLASTWAVE 240 EC or any of the combinations specified on this label must be applied to only healthy growing trees or vines. • Avoid direct plant contact. Direct spray toward the base of tree or vines unless specific use specifications allow over-the-top application. • In Arizona and California, BLASTWAVE 240 EC may be applied during the period following completion of final harvest up to February 15 (February 1st in the Coachella Valley, California). Applications made after these calendar dates, but prior to bud swell, may result in significant crop injury and are the responsibility of the user. • For banded applications, up to 8 pints (2.0 lbs. a.i.) per acre of BLASTWAVE 240 EC per year may be applied within the treated band. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> • In all states, unless otherwise specified, DO NOT apply BLASTWAVE 240 EC during the period between bud swell and completion of final harvest or when fruit/nuts are present. BLASTWAVE 240 EC may be applied upon completion of final harvest. • DO NOT apply more than 8 pints (2.0 lb. active) of BLASTWAVE 240 EC per acre in a single banded application. 		

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Crop-Specific Restrictions:

- **DO NOT** apply more than 6 pts (1.5 lbs ai) per acre per single broadcast application.
- **DO NOT** apply more than a maximum of 6 pints (1.5 lbs. a.i.) broadcast per acre per year.
- **DO NOT** apply more than 3 applications per acre per year when using reduced application rates.
- **DO NOT** make follow up applications within 2 weeks of previous application.
- **DO NOT** apply to grapes or kiwi established less than 3 years unless vines are on a trellis wire a minimum of 3 feet above the soil surface.
- **DO NOT** apply to grapes or kiwi that are not staked or trellised unless vines are free standing.

Key Weeds Controlled (Arizona and California):

Preemergence		Postemergence	
burclover cheeseweed (malva) fiddleneck, coast filaree, broadleaf filaree, redstem filaree, whitestem groundsel, common henbit knotweed, prostrate	lambsquarter, common lettuce, prickly pigweed, redroot purslane, common redmaids rocket, London shepherdspurse sowthistle, annual	cheeseweed (malva) fiddleneck, coast filaree, broadleaf † filaree, redstem † filaree, whitestem † groundsel, common henbit	minierslettuce nettle, burning pigweed, redroot redmaids shepherdspurse sowthistle, annual

† **BLASTWAVE 240 EC** at the 6-pint (1.5 lbs. a.i.) rate will provide control of filaree not exceeding the 4-inch stage. Applications to filaree beyond the 4-inch stage may result in partial control.

Key Weeds Controlled (All Other States Except Arizona and California):

Preemergence		Postemergence	
camphorweed cudweed, narrowleaf eveningprimrose, cutleaf † groundcherry, cutleaf jimsonweed lambsquarters, common nightshade, American black nightshade, black pepperweed, Virginia	pigweed, redroot poinsettia, wild sida, prickly smartweed, Pennsylvania sowthistle, annual spurge, prostrate spurge, spotted velvetleaf	balsamapple cocklebur, common cudweed, narrowleaf †† eveningprimrose, cutleaf ††† groundcherry, cutleaf groundcherry, Wright jimsonweed lambsquarters, common morninggory, annual nightshade, American black nightshade, black	pepperweed, Virginia pigweed, redroot poinsettia, wild purslane, common sesbania, hemp shepherdspurse sida, prickly (teaweed) smartweed, Pennsylvania sowthistle, annual velvetleaf

† Highest rate and/or multiple applications may be required for acceptable control.

†† Maximum 0.5-inch diameter.

††† Highest rate and/or multiple applications may be required for acceptable control.

PISTACHIOS, WALNUTS, ALMONDS (CALIFORNIA AND ARIZONA ONLY)
(Non-Dormant Application)

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	5 – 6 (1.25 – 1.5 lbs. a.i.)	Preemergence: For residual weed control of listed weeds.
Postemergence	1 – 2 (0.25 – 0.5 lbs. a.i.)	Postemergence (Suppression): Apply to seedling weeds less than 4 inches in height. Repeat applications may be required.
	2 – 6 (0.5 – 1.5 lbs. a.i.)	Postemergence (Cleanup): Contact (postemergence) control for cleanup sprays and preharvest applications. Apply to seedling weeds less than 4 inches in height. Applications to weed seedlings beyond the 4-inch stage may result in partial control.
Tank Mixing: For broader spectrum grass and broadleaf weed control in tree row middles, BLASTWAVE 240 EC may be tank mixed with either paraquat or glyphosate. Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply.		
Chemigation: Follow chemigation instructions in Product Use Information section.		
Flood (Basin) Irrigation: For flood (basin) irrigation systems, meter continuously into the water during the entire irrigation period. Best weed control results are obtained when a uniform distribution and flow of irrigation water is maintained over level land. Irrigation water treated with BLASTWAVE 240 EC must be contained on the treated area until the water is absorbed by the soil.		
Low Volume Sprinkler (Microsprinkler) and Drip (Trickle) Irrigation: Apply only through low-volume sprinkler or drip systems designed to uniformly distribute irrigation water beneath the tree canopy. Applications must be made prior to weed emergence; otherwise postemergence activity may be inconsistent due to uneven coverage. Meter BLASTWAVE 240 EC at a continuous rate during the middle 1/3 of the irrigation period and discontinue application during the final 1/3 of the irrigation period to ensure proper flushing of the irrigation system. Use of BLASTWAVE 240 EC through low-volume sprinklers or drip emitters helps to reduce the "ring effect" of weed escapes in areas around sprinklers or emitters where previously applied broadcast or directed treatments begin to break down.		
Precautions: <ul style="list-style-type: none"> • Direct spray toward the base of trees. Avoid direct contact with foliage or nuts. • BLASTWAVE 240 EC must be applied only to healthy growing trees. 		
Crop-Specific Use Restrictions: <ul style="list-style-type: none"> • When applied as a non-dormant treatment, BLASTWAVE 240 EC can only be applied to pistachio plantings between May and 7 days prior to harvest. • When applied as a non-dormant treatment, BLASTWAVE 240 EC can only be applied to almond plantings between April 1 and September 30 and to walnut plantings between May 1 and September 30. • DO NOT apply BLASTWAVE 240 EC within 7 days of harvest of pistachios. • DO NOT apply BLASTWAVE 240 EC within 30 days of harvest of almonds. • DO NOT apply BLASTWAVE 240 EC within 7 days of harvest of walnuts. • DO NOT apply more than 6 pints (1.5 lbs. a.i.) of BLASTWAVE 240 EC broadcast per acre in a single application. 		

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Crop-Specific Use Restrictions:

- **DO NOT** apply more than 6 pints (1.5 lbs. a.i.) of **BLASTWAVE 240 EC** per acre per year during the non-dormant period.
- **DO NOT** make more than 3 applications per acre per year when using reduced application rates.
- **DO NOT** make follow up applications within 2 weeks of previous application.

Key Weeds Suppressed and/or Controlled

cheeseweed, malva fiddleneck, coast filaree, broadleaf filaree, redstem filaree, whitestem groundsel, common henbit minerslettuce	morningglory species, annual mustard, black nettle, burning pigweed, redroot purslane, common redmaids rocket, London sowthistle, annual
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Additional Weeds Controlled in Tank Mix with Glyphosate or Paraquat

barnyardgrass bluegrass, annual chickweed, common	horseweed (marestail) rocket, London ryegrass, Italian
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ALMONDS- REDUCED PREHARVEST INTERVAL

CALIFORNIA ONLY

Nondormant Application with a 30 to 15 Day PHI

Weed Control	Rate (pint/acre)	Specific Use Directions
Postemergence suppression (seedlings less than 4 inches in height.)	0.5 (0.125 lbs. a.i.)	<p>BLASTWAVE 240 EC provides effective suppression of cheeseweed (Malva), fleabane and marestail(horseweed) as well as other weeds listed below in non-dormant almonds when applied to young broadleaf weed seedlings. For enhanced postemergence activity against these target weeds as well as other weed species, tank mixtures of BLASTWAVE 240 EC with either paraquat or glyphosate may be used to increase the spectrum of weed control by either of these tank mix partners. Compatibility of each mixture must be established before tank mixing and application must be applied by ground equipment. Follow all precautions and restrictions on the labeling of the products to be tank mixed.</p> <p>For summer broadleaf weed control, apply no more than 5 pints (1.25 lbs.a.i.) of BLASTWAVE 240 EC per broadcast acre prior to the February 15th cutoff. Then for summer use, apply no more than 0.5 pints (0.125 lbs.a.i.) per broadcast acre up to 30 days before harvest, and no more than 0.5 pints (0.125 lbs. a.i.) per broadcast acre between 30 and 15 days before harvest. For a broader spectrum of grassweeds and broadleaf weeds control in the tree row middles, a tank mixture of BLASTWAVE 240 EC with either paraquat or glyphosate can be used. Read and follow the labeling of either the paraquat or glyphosate pesticide product which is to be tank mixed with BLASTWAVE 240 EC.</p>

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Ground Application: Apply a minimum spray volume of 10 gallons of water per acre. Use higher volumes to ensure adequate coverage in high densities of emerged weeds or heavy trash. Use conventional low-pressure ground spray equipment with flat fan spray nozzles at 20 to 40 psi. Position an off-center nozzle at the end of the boom. Spray equipment calibrated carefully before each use.

Chemigation Application: Apply this product only through flood (basin) irrigation systems, or low-volume sprinkler (microsprinkler) and drip (trickle) irrigation systems designed to distribute irrigation water beneath the tree canopy. For additional information on these systems, see the APPLICATION THROUGH IRRIGATION SYSTEMS - CHEMIGATION section of this label.

Cultural Considerations For All Applications: In order to provide maximum effectiveness of preemergence activity of **BLASTWAVE 240 EC**, the berm or soil surface must be level, smooth, and free of crop or weed trash (decaying leaves, clippings, dead weeds, etc.). Remove leaves and trash by blowing the area to be treated or by thoroughly mixing the trash into the soil through cultivation prior to herbicide applications.

Cultural practices that result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of **BLASTWAVE 240 EC**. Cutting water furrows or cultivations that mix untreated soil into treated areas will also reduce the effectiveness of the treatment.

Precautions:

- Apply **BLASTWAVE 240 EC** only to healthy trees.
- Direct spray toward the base of the tree. Avoid direct herbicide contact with foliage and fruit.

Specific Use Restrictions:

- When applied as a non-dormant treatment, **BLASTWAVE 240 EC** can only be applied to almonds between April 1 and September 30.
- **DO NOT** apply more than 0.5 pints (1.0 lb. a.i.) of **BLASTWAVE 240 EC** broadcast per acre in a single application.
- **DO NOT** apply more than 6 pints (1.5 lbs. a.i.) broadcast per acre of **BLASTWAVE 240 EC** during the non-dormant period.
- In order to use 0.5 pints (0.125 lbs. a.i.) **BLASTWAVE 240 EC** at 15 days before harvest, no more than 5 pints (1.25 lbs. a.i.) must have been applied within 60 days of harvest and no more than 0.5 pints (0.125 lbs. a.i.) must have been applied within 30 days of harvest.
- **DO NOT** apply more than 6 pints (1.5 lbs. active) of **BLASTWAVE 240 EC** broadcast per acre in one year.
- **DO NOT** make more than 4 applications per year when using reduced application rates.

Weeds Suppressed and/or Controlled

Cheeseweed (Malva) Fiddleneck, Coast Filaree, Broadleaf Filaree, Redstem Filaree, Whitestem Groundset, Common Henbit Miner's Lettuce	Morningglory Species, Annual Mustard, Black Nettle, Burning Pigweed, Redroot Purslane, Common Redmaids Rocket, London Sowthistle, Annual
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Additional Weeds Controlled in Tank Mix with Glyphosate or Paraquat

Barnyardgrass Bluegrass, Annual Chickweed, Common Fleabane	Horseweed (Marestail) Rocket, London Ryegrass, Italian
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APRICOTS, NECTARINES, OLIVES, PEACHES, PLUMS AND PRUNES
CALIFORNIA ONLY

Nondormant Application to Apricots, Nectarines, Olives, Peaches, Plums and Prunes in California

Weed Control	Rate (pint/acre)	Specific Use Directions
Postemergence suppression (seedlings less than 4 inches in height.)	0.5 (0.125 lbs. a.i.)	<p>BLASTWAVE 240 EC provides effective postemergence control of cheeseweed (Malva), Fleabane, and Marestail (Horseweed) young broadleaf weed seedlings in non-dormant apricots, nectarines, olives, peaches, plums and prunes. For enhanced postemergence activity against these target weeds as well as other weed species, tank mix BLASTWAVE 240 EC with either paraquat or glyphosate to increase the spectrum of weed control by either of these tank mix partners.</p> <p>Compatibility of each mixture must be established before tank mixing and application must be applied by ground equipment. Follow all precautions and restrictions on the labeling of the products to be tank mixed.</p> <p>Repeat applications may be required. For a broader spectrum of grass weeds and broadleaf weeds control in the tree row middles, a tank mixture of BLASTWAVE 240 EC with either paraquat or glyphosate can be used. Read and follow the labeling of either the paraquat or glyphosate pesticide product which is to be tank mixed with BLASTWAVE 240 EC.</p>
<p>Ground Application: Apply a minimum spray volume of 10 gallons of water per acre. Use higher volumes to ensure adequate coverage in high densities of emerged weeds or heavy trash. Use conventional low-pressure ground spray equipment with flat fan spray nozzles at 20 to 40 psi. Position an off-center nozzle at the end of the boom. Calibrate spray equipment carefully before each use.</p> <p>Chemigation Application: Apply this product only through flood (basin) irrigation systems, or low-volume sprinkler (microsprinkler) and drip (trickle) irrigation systems designed to distribute irrigation water beneath the tree canopy. For additional information on these systems, see the APPLICATION THROUGH IRRIGATION SYSTEMS - CHEMIGATION section of this label.</p> <p>Cultural Considerations for All Applications: In order to provide maximum effectiveness of preemergence activity of BLASTWAVE 240 EC, the berm or soil surface must be level, smooth, and free of crop or weed trash (decaying leaves, clippings, dead weeds, etc.). Remove leaves and trash by blowing the area to be treated or by thoroughly mixing the trash into the soil through cultivation prior to herbicide applications.</p> <p>Cultural practices that result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of BLASTWAVE 240 EC. Cutting water furrows or cultivations that mix untreated soil into treated areas will also reduce the effectiveness of the treatment.</p> <p>For best results, apply to established berms or soil surfaces that are left undisturbed during the time period for which weed control is desired.</p>		
<p>Precautions:</p> <ul style="list-style-type: none"> Apply BLASTWAVE 240 EC only to healthy trees. Direct spray toward the base of the tree. Avoid direct herbicide contact with foliage and fruit. 		

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Specific Use Restrictions

- When applied as a non-dormant treatment, **BLASTWAVE 240 EC** can only be applied to apricots, peaches, nectarines, plums and prunes after May 1.
- **BLASTWAVE 240 EC** can only be applied as a nondormant treatment to olives after bloom.
- **DO NOT** apply more than 0.5 pints (0.125 lbs. a.i.) of **BLASTWAVE 240 EC** broadcast per acre per single application during the non-dormant period.
- **DO NOT** apply more than 1 pint (0.25 lbs. a.i.) broadcast per acre of **BLASTWAVE 240 EC** during the non-dormant period.
- **DO NOT** apply **BLASTWAVE 240 EC** within 14 days of harvest of fruit.
- **DO NOT** apply more than 6 pints (1.5 lbs. ai) broadcast per acre of **BLASTWAVE 240 EC** per year.
- **DO NOT** make more than 4 applications per year when using reduced application rates.

WINDBREAKS AND SHELTERBELTS

(For Use Only in Minnesota, North Dakota, South Dakota and Wyoming)

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence Postemergence	4 – 6 (1.0 – 1.5 lbs. a.i.)	<p>Apply BLASTWAVE 240 EC as a broadcast, banded orpost-directed spray.</p> <p>Preemergence control is most effective when spray is applied to clean, weed-free soil surfaces. Pre-transplant applications must be made after completion of soil preparation but prior to transplanting. Transplanting must be completed with minimal soil disturbance. For optimum weed control results, treated soil surfaces must be left undisturbed during the time period for which weed control is desired.</p> <p>Postemergence Weed Control: For best results, apply before 4-leaf stage for broadleaf weeds or 2-leaf stage for grass weeds.</p> <p>Conifers: BLASTWAVE 240 EC can be applied pre-transplant, post-directed or postemergence (over-the-top) to conifers. Postemergence or post-directed applications may be applied prior to budbreak or after new growth foliage has hardened off and new terminal buds have formed.</p> <p>Deciduous Hardwoods: BLASTWAVE 240 EC has exhibited selectivity to many deciduous species when applied pre-transplant or as a post-directed spray prior to budbreak.</p>
Precautions:		
<ul style="list-style-type: none"> • Important: Some varieties or cultivars of conifers or deciduous species listed may be susceptible to BLASTWAVE 240 EC. Care must be taken to ensure that the particular variety to be sprayed with BLASTWAVE 240 EC is tolerant. For unfamiliar species, it is suggested that BLASTWAVE 240 EC be tested on a limited number of plants prior to large-scale application. • Occasionally after the use of BLASTWAVE 240 EC, a spotting, crinkling or flecking may appear on the leaves of the deciduous species. Leaves that receive direct or indirect (drift) spray contact will be injured. Deciduous species typically rapidly outgrow these symptoms and develop normally. • Application after budbreak may result in injury to deciduous species and is not advised. If non-dormant application is required, apply only after foliage has fully expanded and hardened off. Avoid direct or indirect spray contact with the foliage by applying to the soil surface as a directed spray. • Apply BLASTWAVE 240 EC only to healthy deciduous and/or conifer trees. 		

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Specific Use Restrictions for Windbreaks and Shelterbelts:

- **DO NOT** apply more than 6 pints (1.5 lbs. a.i.) of **BLASTWAVE 240 EC** per acre in a single application.
- **DO NOT** apply more than 18 pints (4.5 lbs. a.i.) per acre per year.
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- **DO NOT** make follow up applications within 8 weeks of previous application.
- **DO NOT** apply **BLASTWAVE 240 EC** to conifers or deciduous trees that have been weakened or under stress from excessive fertilizer or soil salts, disease, nematodes, frost, drought, flooding, previously applied pesticides, soil insects, or winter injury, as severe injury may result.

Key Broadleaf Weeds Controlled:

buckwheat, wild burclover carpetweed dock, curly groundcherry, cutleaf groundcherry, Wright groundsel, common henbit jimsonweed	knotweed, prostrate kochia ladysthumb lambsquarters, common lettuce, prickly mallow, little mayweed mustard, blue mustard, tumble	mustard, wild nettle, burning nightshade, black nightshade, hairy oats, wild orach, red pepperweed, yellow flower pigweed, prostrate pigweed, redroot	purslane, common rocket, London shepherdspurse † smartweed, Pennsylvania sowthistle, annual tansy mustard thistle, Russian (seedling) velvetleaf
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† The highest rate or multiple applications may be required for acceptable control.

Key Grasses Controlled:

barnyardgrass bluegrass, annual crabgrass, large	foxtail, giant goosegrass witchgrass
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BLASTWAVE 240 EC may be applied to numerous conifer and deciduous species, including the following:

Conifer Species

	Common Name	Scientific Name
	douglas-fir	<i>Pseudotsuga menziesii</i>
	fir	
	grand	<i>Abies grandis</i>
	fraser	<i>Abies fraseri</i>
	noble	<i>Abies procera</i>
	hemlock	
	eastern hemlock	<i>Tsuga canadensis</i>
	western hemlock	<i>Tsuga heterophylla</i>
	pine	
	Austrian	<i>Pinus nigra</i>
	eastern white	<i>Pinus strobus</i>
	jack	<i>Pinus banksiana</i>
	Himalayan	<i>Pinus griffithii</i>

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Common Name	Scientific Name
loblolly lodgepole longleaf monterey mugo ponderosa scotch shortleaf slash Virginia	<i>Pinus taeda</i> <i>Pinus contorta</i> <i>Pinus palustris</i> <i>Pinus radiata</i> <i>Pinus mugo</i> <i>Pinus ponderosa</i> <i>Pinus sylvestris</i> <i>Pinus echinata</i> <i>Pinus elliotii</i> <i>Pinus virginiana</i>
spruce blue dwarf Alberta Norway Sitka	<i>Picea pungens</i> <i>Picea glauca cornea</i> <i>Picea abies</i> <i>Picea sitchensis</i>
Arborvitae	<i>Thuja occidentalis</i> <i>Thuja orientalis</i>
juniper	<i>Juniperus chinensis</i> <i>Juniperus horizontalis</i> <i>Juniperus procumbens</i> <i>Juniperus sabina</i> <i>Juniperus scopulorum</i>
red cedar	<i>Juniperus virginiana</i>
yew	<i>Taxus spp.</i>

Deciduous Hardwood Species

Common Name	Scientific Name
ash	<i>Fraxinus spp.</i>
crabapple	<i>Malus spp.</i>
eucalyptus	<i>Eucalyptus spp.</i>
lilac	<i>Syringa vulgaris</i>
maple, black	<i>Acer nigrum</i>
oak, northern red	<i>Quercus rubra</i>
olive, Russian	<i>Elaeagnus angustifolia</i>
poplar (cottonwood)	<i>Populus spp.</i>
sweetgum	<i>Liquidambar styraciflua</i>
sycamore	<i>Platanus occidentalis</i>
walnut, black	<i>Juglans nigra</i>

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE:

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to PRECAUTIONARY STATEMENTS on label for hazards associated with the handling of this material. **DO NOT** walk through spilled material. Dispose of pesticide as directed below. In spill or leak incidents, keep unauthorized people away.

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 mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

Non-refillable container. Rigid, Non-refillable plastic containers small enough to shake (i.e., with capacities equal to or less than 5 gallons). DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix-tank. 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. Offer for recycling, if available or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or a 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.

Once container is rinsed, offer for recycling if available, or puncture and dispose of in a sanitary landfill.

Non-refillable containers. Rigid Non-refillable plastic containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs). DO NOT reuse or refill this container. After emptying product from container, rinse and either recycle or dispose of the container as follows: Bottom Discharge IBC (e.g. Schuetz Caged IBC or Snyder Square Stackable).

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix-tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal.

Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g. Snyder 120 Next Gen, Bonar B120, Drums, and Kegs). Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or rinsate collection system. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

[Batch Code will be placed on the container.]

Warranty and Disclaimer Statement

Read the entire DIRECTIONS FOR USE and Warranty and Disclaimer Statement before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The DIRECTIONS FOR USE of this product must be followed carefully. It is impossible to eliminate all risks associated with the use of this product including risks that may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors. Such risks are all beyond the control of Longwind Crops Science USA LLC. ("LONGWIND") and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer and to the extent permitted by applicable law, the user or buyer agree to hold LONGWIND harmless for any claims relating to such risks.

LONGWIND warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the DIRECTIONS FOR USE, subject to the inherent risks described above, when used in accordance with the DIRECTIONS FOR USE under normal conditions. To the extent permitted by applicable law, this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of LONGWIND and the user or buyer assume the risk of any such use.

To the extent permitted by applicable law, LONGWIND disclaims all other warranties, expressed or implied, including any warranty of merchantability or fitness for a particular purpose. To the extent permitted by applicable law, LONGWIND, manufacturer, and seller disclaim and shall not be liable for any special, incidental, indirect, or consequential damages (including claims based on breach of warranty, contract, negligence, tort, strict liability or otherwise) resulting from the use, handling, application, storage, or disposal of this product or for damages in the nature of penalties, and the user and buyer waive any right that they may have to such damages. No agent, representative or employee of LONGWIND is authorized to make any warranty, guarantee or representation beyond those contained herein or to modify the warranties contained herein.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF LONGWIND, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT LONGWIND'S ELECTION, THE REPLACEMENT OF THE PRODUCT.