GROUP 2 4 HERBICIDES

Rave®
Herbicide

syngenta®

For weed control in wheat, barley, pasture, rangeland, fallow cropland, and Conservation Reserve Program acres

Active Ingredients:	
Triasulfuron[1]:	8.8%
Sodium salt of dicamba[2]:	55.0%
Other Ingredients:	36.2%
Total:	100.0%

[1](CAS No. 82097-50-5)
[2](CAS No. 1982-69-0)

Rave is a water-dispersible granule containing 50.0% 3,6-dichloro-o-anisic acid (dicamba).

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-927
EPA Est. No. 065387-AR-001
EPA Est. No. 11773-IA-01

SCP 927A-L1G 0815
4056114

5 pounds
Net Weight

™

PULL HERE TO OPEN

FIRST AID	
If in eyes	• 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.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call **1-800-888-8372**	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Causes eye irritation. Harmful if inhaled, swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. 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.

Personal Protective Equipment

Some materials that are chemical resistant to this product are made of any waterproof material.

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PRECAUTIONARY STATEMENTS *(continued)*

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

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves

See engineering controls for additional requirements.

User Safety Requirements

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.

Engineering Controls

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

User Safety Recommendations

Users should:

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

Environmental Hazards

For terrestrial use: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Keep out of lakes, streams, or ponds. Do not contaminate water when disposing of equipment wash water or rinsate.

Groundwater Advisory

Both active components of Rave have been identified in ground water sampling under vulnerable conditions. There is the possibility that the active ingredients in Rave may leach through soil to ground water, especially where soils are coarse and ground water is near the surface. Consult with the pesticide state lead agency or local agricultural agencies for information regarding soil permeability and aquifer vulnerability in your area.

Chemigation

Do not apply Rave through irrigation systems.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability 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 inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA 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 referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) This warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

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AGRICULTURAL USE REQUIREMENTS *(continued)*

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

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant headgear for overhead exposure
- 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.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR WEED CONTROL, AND/OR ILLEGAL RESIDUES.

PRODUCT INFORMATION

Rave is a herbicide for control of many broadleaf weeds in wheat, barley, pasture, rangeland, fallow, and Conservation Reserve Program (CRP) acres. This product should be applied postemergence; i.e., after emergence of the crop and weeds. Refer to Table 1 for a listing of weeds controlled. Rave is a water-dispersible granule that must be thoroughly mixed in water and applied as a spray.

Rave kills weeds using two modes of action. One active ingredient inhibits the acetolactate synthase (ALS) enzyme which is necessary for plant growth. The other active ingredient disrupts normal plant growth. Growth of susceptible weeds is inhibited soon after application of Rave. Leaves of susceptible plants turn yellow and/or red followed by death of the growing point.

Because Rave is a herbicide with two modes of action, weed resistance is less likely to be a problem than when products with a single mode of action are used. However, in fields where ALS-resistant weed biotypes occur that are not controlled by dicamba products such as Banvel® or Clarity®, a non-ALS inhibitor herbicide that is active on those weeds must either be tank mixed with Rave (see tank mix section) or used in place of Rave.

Precautions Rave Herbicide

- To avoid possible crop injury, do not apply Rave to wheat or barley that is under stress. Common stress factors include: (1) extremes in temperature or rainfall; (2) disease or insect pressure; or (3) when extremes in temperature or rainfall are expected within a few days of application.
- Application of Rave to small grains during periods of rapid growth may result in crop leaning. This condition is temporary and will not affect crop yield.
- For optimum control, fall applications of Rave must be made before the emerged weeds are exposed to extended periods of freezing temperatures.

Restrictions for Rave Herbicide

- Use Rave in the following states only: CO (except the San Luis Valley), ID, KS, MN, MT, ND, NE, NM, NV, OK, OR, SD, TX, UT, WA, and WY.

- Do not use Rave in the San Luis Valley of CO.
- In WA, abide by all sulfonylurea aerial application rulings in effect by the Washington Department of Agriculture.
- Delay application of Rave for at least 60 days after any in-furrow application of an organophosphate insecticide.
- Do not apply Rave where wheat or barley is underseeded with legumes or forage grasses, as injury to the undersown crop(s) may occur.
- Do not apply Rave within 4 hours of an expected rainfall or sprinkler irrigation event. Rainfall or irrigation soon after application may reduce foliar uptake by weeds, thereby reducing weed control.
- Do not apply Rave to stressed or dormant weeds, or when environmental conditions that stress weeds or cause weed dormancy are expected within one week after application.
- Do not use Rave in a herbicide tank mixture if wild oat is the primary target weed.
- Do not apply Rave to irrigated land if the tail water will be used on nontarget land. Do not contaminate irrigation ditches or water used for domestic purposes.
- Do not allow spray to drift to nontarget crops, other desirable plants, recreational areas, ornamental plants, or onto land scheduled to be planted with crops not on this label.
- Do not apply Rave where its movement through the soil or on soil particles may place it in contact with nontarget plants or their roots. Do not apply Rave to snow-covered soil or to frozen soil surfaces, since runoff may occur.

Resistance Management Recommendations

GROUP **2** | **4** HERBICIDES

Rave herbicide contains the active ingredients triasulfuron which inhibits the acetolactate synthase (ALS) enzyme (Site of Action Group 2) and dicamba which interferes with the plant's growth hormones (auxins) (Site of Action Group 4). Some naturally occurring weed populations have been identified as resistant to Group 2 and 4 herbicides. Selection of resistant biotypes, through repeated use of these herbicides or lower than recommended use rates in the same field, may result in weed control failures. A resistant biotype may be present where poor performance cannot be attributed to adverse environmental conditions or improper application methods. If resistance is suspected, contact your local Syngenta representative and/or agricultural advisor for assistance.

General principles of herbicide resistant weed management:

Employ integrated weed management practices. Use multiple herbicide sites-of-action with overlapping weed spectrums in rotation, sequences, or mixtures.

Use the full recommended herbicide rate and proper application timing for the hardest to control weed species present in the field.

Scout fields after herbicide application to ensure control has been achieved. Avoid allowing weeds to reproduce by seed or to proliferate vegetatively.

Monitor site and clean equipment between sites.

Start with a clean field and control weeds early by using a burndown treatment or tillage in combination with a preemergence residual herbicide as appropriate.

Use cultural practices such as cultivation and crop rotation, where appropriate.

Use good agronomic principles that enhance crop competitiveness.

Ground Water Protection: This product may not be mixed, loaded, or used within 50 ft of all wells, including abandoned wells, drainage wells, and sinkholes. Do not use Rave in fields where the combination of all three of the following criteria occurs:

- Historic average annual rainfall (or the combination of historic annual rainfall plus planned irrigation of the crop) exceeds 35 inches per year; and
- The ground water table is 30 ft or less below the soil surface; and
- The soil is classified as a coarse soil (sand or loamy sand soil texture).

Chemigation: Do not apply this product through any type of chemigation or irrigation system.

Maximum Application Rate: The maximum amount of Rave that can be applied in a calendar year is 4 oz/A on wheat and barley and 5 oz/A on pasture, rangeland, fallow, and Conservation Reserve Program acres. Do not make more than one application per calendar year.

- Prevent all direct and indirect contact with nontarget plants.
- Do not apply near desirable vegetation, and allow adequate distance between target area and desirable plants.

MIXING AND APPLICATION PROCEDURES

Water as Carrier

1. Be sure the sprayer is clean.
2. Always use clean water. Fill the tank with 25% of the total water needed, and begin agitation.
3. Be certain that the agitation system is working properly and that it creates a rippling or rolling action on the liquid surface.
4. Add the appropriate amount of Rave to the tank.
5. Complete filling of the tank, maintaining sufficient agitation at all times to ensure surface action. This applies to both spray and nurse tanks.
6. Disperse Rave completely (agitate for 1-2 minutes) before adding surfactant or another chemical to the tank.
7. A nonionic surfactant with a minimum of 80% of the constituents effective as a spray adjuvant must be added at 1-2 pt/100 gal of spray volume (0.125-0.25% volume per volume) for all applications of Rave when water is the carrier. Use 0.25% v/v surfactant when applying Rave to dense weed populations or under dry conditions. On Bermudagrass pastures, a good quality crop oil concentrate at 1 qt/100 gal may be substituted for nonionic surfactant.
8. Maintain continuous agitation while the spray suspension is in the tank.
9. Mix only sufficient spray suspension to be used the same day; however, Rave will remain active in the spray mixture for 36 hours.

When an adjuvant is to be used with this product, the use of an adjuvant that meets the standards of the Chemical Producers and Distributors Association (CPDA) adjuvant certification program is recommended.

Liquid Fertilizer as Carrier (Slurry Method)

Before mixing large quantities, a compatibility test should be conducted. The mixing steps are the same as listed for water above, except Rave must first be dispersed in water as described in the following steps prior to adding it to the spray tank (step 4 above).

1. Partially fill a container with water.
2. Add Rave to the container.
3. Mix or shake it vigorously until the product is completely dispersed.
4. When Rave is completely dispersed, add the slurry to the spray tank. When using a surfactant with liquid fertilizer solutions, add the surfactant to this water slurry before adding the mixture to the spray tank.
5. Rinse the container with water, and add the rinsate to the spray tank.
6. Continue with steps 5-9 in the **Water as Carrier** instructions above.

OR

Liquid Fertilizer as Carrier (Inductor or Cone Method)

Rave may be mixed in an inductor cone before adding it to the liquid fertilizer on sprayers so equipped, as described in the following steps.

1. Shut off inductor cone valve and partially fill the cone with water.
2. Add Rave to the water in the cone and wait for the Rave to disperse.
3. When Rave has completely dispersed, open the inductor cone valve in order to add Rave mixture to the spray tank. When using a surfactant with liquid fertilizer solutions, add the surfactant to the water mixture in the cone before opening the inductor cone valve.
4. Rinse the inductor cone thoroughly and keep the valve open so the rinsate is added to the spray tank.
5. Continue with steps 5-9 in the **Water as Carrier** instructions above.

Note: The addition of surfactant to spray mixtures that are more than 50% fertilizer can cause increased temporary leaf burn on the crop. The surfactant may be omitted from the spray solution if the carrier contains more than 50% fertilizer. If the surfactant is omitted, control of some of the more difficult to control weeds may be reduced under unfavorable conditions (i.e., larger weeds, dry conditions, heavy infestations, etc.). For optimum control of those species, a 50% fertilizer solution as a carrier should be used with an appropriate surfactant.

Compatibility (Jar) Testing

Compatibility Test: Check the compatibility of the herbicide and tank mixtures in fluid fertilizer or water by mixing proportionate quantities in a small container, as described below, before mixing in the spray tank. Nitrogen solutions or complete fluid fertilizers may replace all or part of the water in the spray. Since liquid fertilizers can vary, even within the same analysis, **always check compatibility each time before reuse.** Be especially careful when using complete suspension or fluid fertilizers, as serious compatibility problems are more apt to occur. Commercial application equipment may improve compatibility in some instances. The following test assumes a spray volume of 25 gal/A. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

1. Add 1.0 pt of fertilizer or water to each of 2 one-qt jars with tight lids.
2. To **one** of the jars, add 1/4 tsp. or 1.2 milliliters of a compatibility agent approved for this use (1/4 tsp. is equivalent to 2.0 pt/100 gal spray). Shake or stir gently to mix.
3. To **both** jars, add the appropriate amount of herbicide(s). If more than one herbicide is used, add them separately with dry herbicides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix. The appropriate amount of herbicides for this test follows:

   Dry herbicides: For each pound to be applied per acre, add 1.4 teaspoons to each jar.

   Liquid herbicides: For each pint to be applied per acre, add 0.5 teaspoon or 2.5 milliliters to each jar.

4. After adding all ingredients, put lids on and tighten, and invert each jar 10 times to mix. Let the mixtures stand 15 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the 2 jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (A) slurry the dry herbicide(s) in water before addition, or (B) add 1/2 of the compatibility agent to the fertilizer and the other 1/2 to the emulsifiable concentrate or flowable herbicide before addition to the mixture. If still incompatible, do not use the mixture.

5. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the directions in the **Storage and Disposal** section at the end of this label.

Spray Drift Management

Do not allow spray from either ground or aerial equipment to drift onto adjacent land or crops. When drift may be a problem, do everything possible to reduce spray drift, including:

- Do not spray if wind speeds are or become excessive. Do not spray if wind speed is 10 mph or greater. If sensitive crops or plants are downwind, extreme caution must be used under all conditions. Do not spray if winds are gusty.
- Use extreme caution when conditions are favorable for drift (high temperatures, dry conditions, low relative humidity), especially when sensitive plants are nearby.
- Drift from aerial applications of the herbicide is likely to result in damage to sensitive plants adjacent to the treatment site. This damage may occur at levels below concentrations that can be detected with chemical analysis.
- Do not apply when a temperature inversion exists. If inversion conditions are suspected, consult with local weather services before making an application.
- Further reductions in drift can be obtained by:
  1. Using large droplet size sprays. Do not use nozzles that produce small droplets. Orient nozzles downward and slightly backward as needed to reduce drift for ground applications.
  2. Orienting nozzles straight back with the windstream, using straight stream orifices for aerial applications. Use the lowest number of nozzles practical with the largest possible orifice size to obtain a 2-10 gal/A aerial spray volume. Application height and boom length should be selected according to manufacturer's instructions to minimize drift.
  3. Increasing the volume of spray mixture (for example, a minimum of 20 gal/A for ground applications) by using higher flow rate nozzles. Using lower pressure with the appropriate nozzles to obtain larger droplets will also reduce drift.
  4. Applying as close to target plants as practical, while maintaining a good spray pattern for adequate coverage.

Cleaning Equipment after Rave Application

Many crops are extremely sensitive to low rates of Rave. Special attention must be given to cleaning spray equipment before spraying a crop other than wheat or barley.

Mix only as much spray suspension as needed. Immediately after spraying, remove all traces of Rave from spraying equipment using this procedure:

1. Flush tank and hoses with clean water for 10 minutes.
2. Refill spray tank with water, and add 1 gal of household ammonia (containing 3% active) per 100 gal of water. Flush solution through hoses, boom, and nozzles; and let stand in tank for 15 minutes with agitation before disposing, according to state and local regulations.

Note: A commercial tank cleaner may be used in place of the ammonia solution if it has been proven effective for use with Rave. Contact your Syngenta representative or dealer for information about the suitability of specific tank cleaning products before using them according to manufacturer's directions.

3. Repeat step 2.
4. Repeat step 1.
5. Clean nozzles and screens separately. To remove traces of cleaning solution, flush the nozzles and screens with clean water.
6. Flush boom and hoses with clean water for 5 minutes, just before using the sprayer for the first time after application of Rave.

SPRAY EQUIPMENT

Calibrate spray equipment before use.

Agitation

Use equipment that is capable of continuous and vigorous tank agitation. When the tank is full, the agitation system should be capable of creating a rippling or rolling action on the liquid surface.

Screens

Use a 16-mesh strainer at the tank outlet. At the nozzles, use the screen recommended by the nozzle supplier.

Ground Application

- For ground application of 5-20 gal/A, use only conventional or low pressure flat fan nozzles to assure adequate coverage.
- For ground application of more than 20 gal/A, raindrop or flood-jet nozzles may be used.
- In dense stands of wheat or barley, use an adequate spray volume to provide uniform coverage of the weeds.

Aerial Application

- Use equipment that delivers a spray volume of 2-10 gal/A.
- Apply at a maximum height of 10 ft above the crop with low-drift nozzles at a maximum pressure of 40 psi and wind speed not exceeding 10 mph to assure application within the target area.
- Do not apply under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

SPECIFIC USE DIRECTIONS

Weed Control

Table 1: Weeds Controlled or Suppressed by Rave Applied Postemergence to Crop and Weeds

Weeds Controlled or Suppressed by Rave Applied Postemergence	Weed Size Range for Optimum Control (inches)	
Rave rate -	2 oz/A	3-4 oz/A***
Bindweed, Field		1-4*
Broomweed, Common		1-4
Buckwheat, Tartary		1-3

continued...

Table 1: Weeds Controlled or Suppressed by Rave Applied Postemergence to Crop and Weeds *(continued)*

Weeds Controlled or Suppressed by Rave Applied Postemergence	Weed Size Range for Optimum Control (inches)	
Rave rate –	2 oz/A	3-4 oz/A***
Buckwheat, Wild**	1-3*	1-4
Buttercup, Bur		2-6
Buttercup, Creeping		2-6
Buttercup, Tall		2-6
Chamomile, Corn	1-4*	1-4
Chickweed, Common	1-3*	1-3
Chickweed, Jagged (Umbrella Spurry)		1-4
Cockle, Corn	1-4*	1-4
Cockle, Cow		1-4*
Cocklebur, Common	1-6*	1-6
Coreopsis, Plains		1-4
Cornflower		1-4
Croton, Woolly		1-4
Dock, Curly		1-6*
Eveningprimrose, Cutleaf	1-4*	1-4
Fiddleneck, Coast (Tarweed)	1-4	1-6
Fleabane, Annual	1-3*	1-4
Fleabane, Rough	1-3*	1-4
Flixweed	1-6	1-12
Forget-me-not		1-3
Garlic, Wild	2-8*	2-14*
Goldenrod		1-6*

Weeds Controlled or Suppressed by Rave Applied Postemergence	Weed Size Range for Optimum Control (inches)	
Rave rate –	2 oz/A	3-4 oz/A***
Gromwell, Corn	1-4*	1-4
Groundsel, Common	1-4*	1-4
Henbit	0-2*	0-2
Horseweed (Marestail)	2-6*	2-8
Houndstongue		1-6*
Knotweed, Prostrate		1-4*
Kochia	1-4	2-8
Ladysthumb		1-6
Lambsquarters, Common	1-4*	1-4
Lettuce, Prickly (China Lettuce)	2-6*	2-6
Mallow, Common	1-4*	1-4
Marshelder		1-4
Minerslettuce		1-4
Morningglories, Annual		1-6*
Mustard, Blue (Purple)	1-8	1-14
Mustard, Indian	1-6	1-8
Mustard, Tall Hedge	1-6	1-14
Mustard, Tumble (Jim Hill)	1-8	1-14
Mustard, Wild	1-8	1-14
Nightshade, Black and Eastern Black	1-4*	1-4
Onion, Wild	2-8*	2-14*
Pennycress, Field (Fanweed)	1-6	1-12

continued...

Table 1: Weeds Controlled or Suppressed by Rave Applied Postemergence to Crop and Weeds *(continued)*

Weeds Controlled or Suppressed by Rave Applied Postemergence	Weed Size Range for Optimum Control (inches)	
Rave rate –	2 oz/A	3-4 oz/A***
Pepperweed, Greenflower		1-6*
Pepperweed, Virginia	1-6*	1-8
Pigweed, Prostrate	1-6*	1-6
Pigweed, Redroot (Carelessweed)	1-6*	1-6
Pigweed, Smooth	1-6*	1-6
Pigweed, Tumble	1-6*	1-6
Polemonium, Annual (Jacobs-ladder)	1-3	
Puncturevine		1-8
Purslane, Common	1-6*	1-6
Radish, Wild	1-6	1-8
Ragweed, Common	1-6	1-8
Ragweed, Giant	1-3*	1-4
Ragweed, Lanceleaf		1-8
Ragweed, Western		1-6*
Rocket, London		1-4
Shepherd's purse	1-6	1-12
Smartweed, Pennsylvania	1-4*	1-6
Sowthistle, Annual	1-3*	1-4
Sunflower, Common	2-4	2-8
Tansymustard	1-6	1-12
Thistle, Canada	1-3*	1-6*
Thistle, Musk	1-3*	1-6

Weeds Controlled or Suppressed by Rave Applied Postemergence	Weed Size Range for Optimum Control (inches)	
Rave rate –	2 oz/A	3-4 oz/A***
Thistle, Russian	1-4*	1-4
Velvetleaf	1-4*	1-4
Vetch, Hairy	1-4*	1-4
Wallflower, Bushy	1-4*	1-4
Yarrow, Common		1-4

***** Indicates "Suppression or Partial Control", which means significant activity but not always at a level considered acceptable for commercial weed control.

****** Apply after true leaves have emerged, not cotyledon stage.

******* Only use the 3 oz/A rate when weeds are at the low end of the indicated size range.

Rave at the 5 oz/A rate in pastures, rangeland and CRP acres will provide first year control and subsequent year suppression of hoary cress (whitetop) and poison hemlock.

Level of weed control is mostly dependent upon weed species, weed size at application, growing conditions, and the level of competition from the crop. Weed control may be reduced if weeds are stressed due to drought, unusually cold temperatures, or other factors that reduce growth. Competition of the crop with the weeds helps in providing control. Optimal control can be obtained for most weed species when they are small; i.e., near the minimum size listed for each weed in Table 1. Weeds larger than the size ranges listed may only be suppressed.

Include a nonionic surfactant in the spray mixture as described in the **Mixing and Application Procedures** section.

POSTEMERGENCE APPLICATIONS TO WHEAT AND BARLEY

Apply Rave when the crop is in the growth stage listed below and the target weeds listed in Table 1 are actively growing and within the specified size ranges.

Crop Growth Stage and Maximum Application Rate

Crop	Maximum Rate	Application Timing
Spring Wheat	4 oz/A	After emergence, up to 6-leaf stage
Winter Wheat*	4 oz/A	After emergence, up to jointing
Spring Barley	2 oz/A	After emergence, up to 4-leaf stage
Winter Barley	4 oz/A	After emergence, up to jointing

*Early developing wheat varieties such as TAM 107, Madison, or Wakefield must be treated between early tillering and the jointing stage.

Tank Mixtures in Wheat and Barley

Recommended tank mix partners for use in wheat and barley include Aim™, Ally®, Buctril®, Bronate®, MCPA, 2,4-D, or Tilt® fungicide.

- Before Rave is used in a tank mixture with the above noted products or other products, the mixture should be tested for compatibility as described in the **Compatibility (Jar) Testing** section.
- Refer to the label of the tank mix partner for additional weeds controlled and directions for use; and observe all precautions and restrictions on the labels of products used in tank mixtures.
- Ensure all tank mix partner products are labeled for the intended use and follow the most restrictive of the labeling limitations and precautions of all products used in the mixtures.
- For control of foot rot and other diseases in wheat in the Pacific Northwest, Tilt fungicide may be applied in tank mixture with Rave. Refer to the Tilt label for specific use directions and restrictions.

- Rave may also be applied in tank mixtures or sequentially with registered organophosphate insecticides, except malathion, but these tank mixtures or sequential applications may cause temporary crop discoloration or crop injury, especially if the crop is under environmental stress at the time of treatment.
- Delay application of Rave for at least 60 days after any in-furrow application of an organophosphate insecticide.
- The PHI for barley is 37 days.
- The PHI for wheat grain is 37 days.
- The PHI for grass forage is 0 days.
- The PHI for grass hay is 7 days.

POSTEMERGENCE RAVE APPLICATION TO PASTURES, RANGELAND, AND CONSERVATION RESERVE PROGRAM (CRP) ACRES

Rave can be applied postemergence for weed control in the following established grasses:

Common Name	Scientific Name
Bermudagrass	*Cynodon dactylon*
Bluestem, Big	*Andropogon gerardi*
Bluestem, Little	*Andropogon scoparius*
Brome, Smooth	*Bromus inermis*
Buffalograss	*Buchloe dactyloides*
Fescue, Sheep	*Festuca ovina*
Grama, Blue	*Bouteloua gracilis*
Grama, Side-oats	*Bouteloua curtipendula*
Redtop	*Agrostis alba*
Timothy	*Phleum pratense*
Wheatgrass, Bluebunch	*Agropyron spicatum*
Wheatgrass, Crested	*Agropyron cristatum*
Wheatgrass, Intermediate	*Agropyron intermedium*
Wheatgrass, Pubescent	*Agropyron tricophorum*

Crop Growth Stage and Maximum Application Rate

For new seedings of the above grasses, do not apply Rave until at least 60 days after emergence of the desirable grasses or 30 days after sprigging of Bermudagrass. Even established stands of orchardgrass, red fescue, and ryegrasses will likely be injured by Rave. If desirable broadleaves, such as clovers and alfalfa, are present, they will likely be severely injured by Rave applications.

For information on weeds controlled, size limitations, and rate of Rave to use, refer to Table 1. In addition to the 2 and 4 oz/A rates, Rave may be applied at 5 oz/A in pasture, rangeland, and CRP acres when heavy infestations of the weeds listed in Table 1 exist.

Rave should be applied to actively growing weeds and a nonionic surfactant or crop oil concentrate should be included in the spray mixture as described in the **Mixing and Application Procedures** section of this label.

Tank Mixtures in Pasture, Rangeland, and CRP Acres

Recommended tank mix partners for use in pasture, rangeland, and CRP acres include 2,4-D, amine or ester, Crossbow™, Weedmaster®, Grazon™ P+D, Stinger®, Tordon™ 22K, and Remedy™ herbicides.

- Before Rave is used in a tank mixture with these or other products, the mixture should be tested for physical compatibility.
- Refer to the label of the tank mix partner for additional weeds controlled and directions for use; and observe all precautions and restrictions on the labels of products used in tank mixtures.
- Ensure all tank mix partner products are labeled for the intended use and follow the most restrictive of the labeling limitations and precautions of all products used in the mixtures.
- Rave may also be applied in tank mixtures or sequentially with registered organophosphate insecticides, except malathion, but these tank mixtures or sequential applications may cause temporary crop discoloration or crop injury, especially if the crop is under environmental stress at the time of treatment.
- Delay application of Rave for at least 60 days after any in-furrow application of an organophosphate insecticide.

POSTEMERGENCE APPLICATIONS TO FALLOW CROPLAND INCLUDING POST-HARVEST SMALL GRAIN CEREAL STUBBLE

Apply Rave at 2 to 4 oz/A to control the target weeds shown in Table 1 when weeds are actively growing and are within the height and diameter range specified. For improved residual activity, a 5 oz/A rate may be used. Fall applications of Rave must be made before the target weeds are exposed to extended freezing temperatures. Always include a nonionic surfactant in the spray mixture as described in the **Mixing and Application Procedures** section. Do not plant durum wheat less than 8 months after a Rave application. Other winter and spring wheat varieties may be planted after 12 days. For other rotational crops, follow the recropping guidelines in the **Grazing and Replanting Following Application of Rave** section.

Tank Mixtures in Fallow Cropland

Recommended tank mixtures in fallow cropland include Gramoxone® SL 2.0, Touchdown® brands, Fallow Master™, Landmaster® BW, and Roundup® brands.

- Before Rave is used in a tank mixture with these other products, the mixture should be tested for compatibility as described in the **Compatibility (Jar) Testing** section.
- Refer to the label of the mix partner for additional weeds controlled and directions for use; and observe all precautions and restrictions on the labels of products used in tank mixtures.
- Ensure all products are labeled for the intended use and follow the most restrictive of the labeling limitations and precautions of all products used in the mixtures.

GRAZING AND REPLANTING FOLLOWING APPLICATION OF RAVE

Except for lactating dairy animals, there are no grazing restrictions following application of Rave. Treated areas should not be grazed by lactating dairy animals before 7 days after treatment. Animals cannot be removed from treated areas for slaughter less than 30 days after application.

Rotational Crop Restrictions

Crop	Soil pH	State/Region	Minimum Interval to Planting Following Rave Application
Wheat (except durum)	all pH levels	all areas	12 days
Durum Wheat	all pH levels	all areas	8 months
Barley, Rye, Oats, Bermudagrass	7.9 or lower	CO, KS, MT, NE, OK, SD, TX, Western ND	6 months
	6.9 or lower	all areas	6 months
	above 6.9	in areas not described above	18 months
Proso Millet	all pH levels	all areas	4 months
Field Corn – IR Hybrids	all pH levels	all areas	4 months
Field Corn - not IR	6.9 or lower	KS, NE, CO east of I-25	14 months
	7.9 or lower	all areas	22 months
	above 7.9	all areas	36 months

continued...

Rotational Crop Restrictions *(continued)*

Crop	Soil pH	State/Region	Minimum Interval to Planting Following Rave Application
Grain Sorghum	7.9 or lower	KS, NE, OK, TX	14 months
	all pH levels	all areas	24 months
Soybeans - STS®	all pH levels	all areas	11 months
Soybeans - not STS	7.5 or lower	Central KS; East Texas; Central and Eastern OK	14 months if 25 inches of precipitation since application
	7.9 or lower	South Central NE; Central KS	26 months if 46 inches of precipitation since application
	all pH levels	all areas	36 months or sooner with successful field bioassay
Alfalfa, Clover, Sugar Beets, Sunflowers, Onions	all pH levels	all areas	24 months and only after a successful field bioassay
All Other Crops	all pH levels	all areas	4 months and only after a successful field bioassay

Field Bioassay Instructions

Using typical tillage, seeding practices, and timings for the particular crop, plant several strips of the desired crop variety across the field which has been previously treated with Rave. Plant the strips perpendicular to the direction Rave was applied. The strips should be located so that all the different field conditions are encountered, including differences in soil texture, pH, and drainage. If the crop does not show visible symptoms of injury, stand reduction, or yield reduction, this field can be seeded with this crop the next growing season after the bioassay. If visible injury, stand reduction, or yield reduction occurs, this crop must not be seeded, and the bioassay must be repeated the next growing season.

Catastrophic Crop Loss

Where a catastrophic crop loss has occurred after a Rave application due to a natural disaster (such as late killing frost, hail, flooding, insect, or disease damage), wheat (except durum) may be planted within 12 days. Follow rotational guidelines for other options. After 4 months, barley, durum wheat, sorghum, or STS soybeans may be planted with the expectation that some level of discoloration, stunting, or other crop injury will occur. Any damage and yield loss that occurs must be accepted by the grower. Growers not willing to accept this potential injury and yield loss are required to follow standard rotational guidelines.

STORAGE AND DISPOSAL

Pesticide Storage and Disposal

Store in original container in a cool, dry place. Do not contaminate water, food, or feed by storage or disposal. Triple rinse herbicide from bottles and use rinsates in the herbicide application. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Handling

Non-refillable container. Do not reuse or refill this container. Triple 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

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For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 927A-L1G 0815
4056114

GROUP 2 4 HERBICIDES

Rave®

Herbicide

For weed control in wheat, barley, pasture, rangeland, fallow cropland, and Conservation Reserve Program acres

Active Ingredients:

Triasulfuron[1]	8.8%
Sodium salt of dicamba[2]	55.0%
Other Ingredients:	36.2%
Total:	100.0%

[1](CAS No. 82097-50-5)
[2](CAS No. 1982-69-0)

Rave is a water-dispersible granule containing 50.0% 3,6-dichloro-o-anisic acid (dicamba).

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See directions for use in attached booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-927
EPA Est. No. 065387-AR-001
EPA Est. No. 11773-IA-01

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Manufactured for:
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, North Carolina
27419-8300

SCP 927A-L1G 0815
4056114

5 pounds
Net Weight

FIRST AID

If in eyes: 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. **If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. **If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person. **If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
HOT LINE NUMBER: For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call **1-800-888-8372**.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Causes eye irritation. Harmful if inhaled, swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. 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.
Environmental Hazards: For terrestrial use: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Keep out of lakes, streams, or ponds. Do not contaminate water when disposing of equipment wash water or rinsate.
Groundwater Advisory: Both active components of Rave have been identified in ground water sampling under vulnerable conditions. There is the possibility that the active ingredients in Rave may leach through soil to ground water, especially where soils are coarse and ground water is near the surface. Consult with the pesticide state lead agency or local agricultural agencies for information regarding soil permeability and aquifer vulnerability in your area.
Chemigation: Do not apply Rave through irrigation systems.

STORAGE AND DISPOSAL

Pesticide Storage and Disposal: Store in original container in a cool, dry place. Do not contaminate water, food, or feed by storage or disposal. Triple rinse herbicide from bottles and use rinsates in the herbicide application. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. **Container Handling:** Non-refillable container. Do not reuse or refill this container. Triple 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.
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