

PM 25

100-763

10433

APR 15 1997

Mr. Thomas J. Parshley  
Novartis Crop Protection  
P.O. Box 18300  
Greensboro, NC 27419-8300

Dear Mr. Parshley:

Subject: Minor Changes  
Peak Herbicide  
EPA Reg. No. 100-763  
Your submission dated March 26, 1997

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable and a stamped copy is enclosed for your records.

Sincerely yours,

James A. Tompkins  
Product Manager 25  
Fungicide-Herbicide Branch  
Registration Division (7505C)

Accu-Pak®

Peak®

HERBICIDE

For weed control in grain sorghum (milo), wheat, barley, rye, oats, triticale, and proso millet

Active Ingredient:

Prosulfuron: 1-(4-methoxy-6-methyl-triazin-2-yl)-3-[2-(3,3,3-trifluoropropyl)-phenylsulfonyl]-urea	.57.0%
Inert Ingredients:	43.0%
<b>Total:</b>	<b>100.0%</b>

Peak is water-dispersible granules.

5 x 3 Oz. Water-Soluble Packets

15 Oz.

Total Net Weight

EPA Reg. No. 100-763

EPA Est. 100-LA-1

EPA Est. 100-FRA-001

Made in France

**ACCEPTED**  
with **COMMENTS**  
In EPA Letter Dated  
**APR 15 1997**  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
100-763

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

See additional precautionary statements and directions for use inside booklet.

This outer protective bag contains Peak in 5 inner water-soluble packets. Entire inner packets and contents dissolve in water. After opening outer bag, immediately dump the required number of unopened inner packets into a sprayer or mix tank partially filled with water. Do not excessively handle the inner soluble packets or expose them to moisture since this may cause rupturing.

NCP (DRAFT FOR PEEK)



**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). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.**

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

- Coveralls
- Waterproof gloves
- Shoes plus socks

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

**General Information**

Peak is a selective herbicide applied after emergence of both crop and weeds for the control of broadleaf weeds in grain sorghum, winter wheat, spring wheat, barley, rye, oats, triticale, and proso millet. In addition, pre-emergence applications can be used in some areas for broadleaf weed control in sorghum. Peak is a water dispersible granule formulation which must be thoroughly mixed in water and applied as a spray.

Refer to Tables 1 and 5 for a listing of weeds controlled when Peak is applied postemergence. The degree of weed control resulting from application of Peak is dependent upon weed species, weed size at application, rate of Peak applied, and growing conditions. Weed control is optimum when ample soil moisture exists and weeds are actively growing.

Peak provides control or partial control of many broadleaf weeds. When reference is made to weeds partially controlled, partial control can mean either erratic control from good to poor or consistent control at a level below that generally considered acceptable for commercial weed control. Peak does not control grass weeds; therefore, if grasses are expected, a grass herbicide (such as Dual II® or Bicep Lite II® preemergence in sorghum) should be applied.

Throughout this label, where rate ranges are an option, use the lower rate of Peak when weeds are in the middle or shorter portion of the recommended size range and the infestation is light or moderate. Use a higher rate of Peak when weeds are in the taller portion of the recommended size range or the infestation is heavy.

Growth of susceptible weeds is inhibited soon after application of Peak. The leaves of susceptible plants turn yellow, red, or brown after several days, followed by death of the growing point. Complete plant death occurs 1-3 weeks after application, depending upon weed species and growing conditions. Weeds not completely killed by Peak are often stunted and are less competitive to the crop. Following postemergence applications, Peak provides residual/soil activity for up to 4 weeks.

This herbicide controls weeds by inhibiting a biochemical process which produces certain essential amino acids necessary for plant growth. The inhibited enzyme system is acetolactate synthase (ALS). Occurrence of ALS-resistant weed biotypes can be prevented or delayed by using this product in tank mixtures or in sequence with other herbicides having a different mode of action, and by using some form of mechanical control or a herbicide with a different mode of action to control weed escapes before they set seed.

Peak applied in accordance with this label rarely causes crop injury. When injury occurs, it is generally of short duration and yield potential is not affected.

**Notes:** To avoid possible illegal residues: (1) Do not graze or feed forage from Peak-treated crops to livestock until 30 days after application, (2) Do not harvest silage until 40 days after application, (3) Do not harvest grain until 60 days after application, (4) Do not apply more than 1 oz./A of Peak in the cropping season, and (5) Complete all Peak applications before sorghum exceeds 30 inches in height and before head emergence; or before small grain cereal crops have the second node detectable in stem elongation.

Do not use Peak in the San Luis Valley of Colorado. In Washington, abide by all sulfonyleurea aerial application rulings in effect by the Washington Department of Agriculture.

---

### **Application Procedures**

---

**Ground Spray Equipment:** Spray nozzles should be uniformly spaced and of the same size, and should provide accurate and uniform application. Use spray nozzles which provide medium droplets.

To help assure accuracy, calibrate sprayer at the beginning of the season before use and recalibrate frequently. For ground application, use a minimum of 5 gals. of water per acre. Higher volumes (i.e., at least 20 gals./A) should be used for severe weed infestations to ensure adequate spray coverage. Always include crop oil concentrate or nonionic surfactant in the spray mixture (see the **Mixing Instructions** section which follows).

Use a pump with capacity to: (1) maintain 35-40 psi pressure at nozzles and (2) provide sufficient agitation within the tank to keep product in suspension. Lower pressures may be used with extended range or drift reduction flat fan nozzles. A centrifugal pump which provides shear action for dispersing and mixing the product is recommended. The pump should provide a minimum of 20 gals./minute/100 gals. tank size circulated through a correctly positioned sparge tube or jet agitators. If jet agitators are used, at least 2 agitators should be aligned on the bottom of the tank pointing towards each end. Agitation during both mixing and application is essential. Screens or strainers placed on the suction side of the pump should be 16-mesh or coarser. Do not place a screen in the recirculation line unless a roller or piston pump is used for spraying the solution. Use 50-mesh or coarser screens between the pump and boom, and when required, at the nozzles. Check nozzle manufacturer's recommendations.

Good weed coverage with the spray mixture is essential for optimum weed control results. Observe sprayer nozzles frequently during the spraying operation to ensure that the spray pattern is uniform. Avoid large spray overlaps which result in excessive rates in the overlap areas. Also, avoid application under conditions when uniform coverage cannot

be obtained or when excessive spray drift may occur. To reduce spray drift, do not apply under windy conditions. Allow adequate distance between target area and desirable vegetation to prevent drift to nontarget areas. Avoid placing nozzles directly over the row and concentrating spray into the sorghum whorls. Boom height for broadcast over-the-top application should be based upon the free-standing height of the crop, not height above the soil surface; and should be at least 15 inches above the crop.

Peak can be applied to the crop postemergence over-the-top or directed. In row crops, if the crop canopy would prevent adequate weed coverage, apply Peak with drop nozzles directed onto the weeds.

**Avoid all direct or indirect contact (such as spray drift) of Peak with crops other than those recommended for treatment on this label, since injury may occur.**

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

**Aerial Application:** Apply Peak in water using a minimum spray volume of 2 gals./A. Include crop oil concentrate or nonionic surfactant in the spray mixture (see following **Mixing Instructions**). Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Make applications 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 help assure accurate application within the target area.

Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

**Recommendations to Avoid Spray Drift**

As with all crop protection products, it is important to avoid off-target movement. Do not allow spray to drift onto adjacent land or crops, as even small amounts may injure sensitive plants. When drift may be a problem, take steps to reduce spray drift, including:

- Do not spray if wind speed is 10 mph or greater. Do not spray if winds are gusty. If sensitive crops or plants are downwind, extreme caution must be used under all conditions.
- Use extreme caution when conditions are favorable for drift (high temperatures, drought, low relative humidity), especially when sensitive plants are located nearby.
- Do not apply when a temperature inversion exists. If an inversion condition is suspected, consult with local weather services before making an application.

- Further reductions in drift can be obtained by:
  1. Using nozzles that provide a uniform droplet size. Do not use nozzles that produce extremely small droplets that are more prone to result in spray drift.
  2. Applying as close to target plants as practical to obtain a good spray pattern for adequate coverage, while maintaining a minimum boom height of 15 inches over the crop canopy.

**Mixing Instructions**

1. Make sure the spray tank is clean before using. If it is contaminated with other materials, mixing problems and/or clogging may occur or injury to the crop may result.
2. Prepare no more spray mixture than is required for the immediate operation.
3. Fill the spray tank 1/4-1/2 full with **clean water** and begin agitation. For applications to small grain cereals, liquid fertilizer may replace part or all of the water as carrier.
4. Make certain that the agitation system is working properly and creates a rippling or rolling action on the water surface. Maintain agitation throughout the mixing and spraying process.
5. Drop the required number of unopened water-soluble packets of Peak into the spray tank all at once. Add any other products packaged in water-soluble film to the tank at the same time. Allow the packets to completely dissolve and the contents of the packets to fully disperse. **Important: Water-soluble packets must always be the first material put into the spray tank after water.**

If liquid fertilizer is used as the total carrier, Peak must be dispersed in water prior to adding it to the spray tank. That may be accomplished by completely dissolving the appropriate number of Peak soluble packets in water in (a) a separate container, or (b) an inductor cone; then add the water mixture to the spray tank.

6. While maintaining agitation, continue filling the spray tank. When the tank is 3/4 full, add any tank mix partners. If AAtrex® (atrazine), Banvel®, Banvel SGF®, Bronate®, Buctril®, Buctril + atrazine, Marksman®, MCPA, Sencor®, or 2,4-D is desired as a tank mix partner, add it next while continuing to agitate. Do not use crop oil concentrate as the spray adjuvant or add liquid nitrogen when using Banvel, Banvel SGF, Bronate, Buctril, Buctril + atrazine, Marksman, MCPA, Sencor, or 2,4-D tank mixtures, i.e., use only nonionic surfactant.

7. For postemergence applications, then add either (a) a high quality petroleum- or vegetable-based crop oil concentrate containing not less than 12% emulsifier at 1-4 pts./A as specified on the oil adjuvant label or (b) a good nonionic surfactant with a minimum of 80% of the constituents effective as a spray adjuvant, at the rate of 1-2 qts./100 gals. of spray mixture (0.25-0.5% volume/volume). Liquid nitrogen fertilizer (28-34%) at 0.5-1 gal./A or 2 lbs./A spray grade ammonium sulfate may also be added to enhance activity. Liquid nitrogen should not be used as a substitute for crop oil concentrate or nonionic surfactant. **Do not use liquid fertilizer as the total spray carrier on sorghum; that option is for small grain cereals only. When liquid fertilizer is used as the spray carrier, a non-ionic surfactant should be included as described above. Do not use crop oil concentrate when liquid fertilizer is the carrier.**
8. Complete filling the tank, maintaining sufficient agitation at all times to ensure surface action until the spray tank mixture is uniform.
9. An anti-foaming agent may be added to reduce excessive foaming, if it occurs.
10. **Do not leave spray in the spray tank without continuous agitation.** Always maintain agitation to avoid separation and build-up of undesirable residues on the walls of the spray tank.
11. Make only sufficient spray mixture which can be used the day in which it will be sprayed; however, Peak will remain active in the spray solution for at least 36 hours.

**Cleaning Equipment after Application**

Because some broadleaf crops are extremely sensitive to low rates of Peak, special attention must be given to cleaning equipment before spraying a crop other than those registered for use and on this label. Mix only as much spray solution as needed. Immediately after spraying, clean equipment thoroughly using this procedure:

1. Flush tank, hoses, boom, and nozzles with clean water.
2. Prepare a tank cleaning solution of one gallon of household ammonia per 50 gals. of water. Do not use chlorine based cleaners such as Clorox®.
3. When available, use a pressure rinser to clean the inside of the spray tank with this solution. Take care to wash all internal parts of the tank, including the inside top surface. Completely fill the sprayer with the cleaning solution to ensure contact of the cleansing solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at

least 15 minutes. All visible deposits must be removed from the spraying system.

4. Flush hoses, spray lines, and nozzles for at least one minute with the cleaning solution.
5. Dispose of rinsate from steps 1-3 in an appropriate manner. Spray the cleaning solution on an untreated crop on which Peak is registered, or return to a rinsate tank for later use as make-up water for spraying crops on which Peak is registered, or use other approved disposal.
6. Repeat steps 2-5.
7. Remove nozzles, screens, and strainers and clean separately in the ammonia cleaning solution after completing the above procedures.
8. Rinse the complete spraying system with clean water.

**Note:** If the tank is equipped with the proper number of correctly mounted 360° tank washing nozzles which are attached to a dedicated rinsing system, less cleaning solution than a full tank may be used. Use sufficient cleaning solution to thoroughly rinse all surfaces. Start the sprayer agitation and recirculate the cleaning solution for at least 15 minutes. Flush the spray boom with the cleaning solution. Repeat the rinsing procedure 1-2 times.

---

**Grain Sorghum (Milo)**

---

Peak controls many broadleaf weeds, including triazine-resistant biotypes, in grain sorghum.

**Postemergence Application (in all sorghum growing areas)**

Postemergence application should be made to sorghum at the rates and timings recommended in Table 1. If weeds are larger than the optimum size range recommended, only partial control may be obtained. For optimum control, if cultivation is to be used, cultivation is recommended 7-14 days after application of Peak.

Peak may be applied postemergence (over-the-top or directed) to actively growing sorghum between 5 and 30 inches in height and prior to head emergence. Within that broad window of application, it is more important to time applications to the optimum weed heights listed in Table 1, rather than crop height. Applications made to sorghum which is less than 5 inches tall increase the likelihood of crop injury. To insure good spray coverage of weeds, applications made after the sorghum is 20 inches tall

should generally be directed or semi-directed using drop nozzles. In drier climates, crop oil concentrate (COC) is the preferred additive, instead of nonionic surfactant, when applying Peak alone.

Refer to Table 2 for the number of water-soluble packets to treat various acreages with Peak at the selected rate.

**Note:** In the northern United States (i.e., north of Interstate Highway 80); if a crop other than field corn, sorghum, wheat, barley, rye, oats, proso millet or triticale, may be planted in this field next year, Peak should be applied only at the 0.5 oz./A or lower rate in a tank mixture. Additionally in these northern areas, rates of Peak should always be reduced to approximately 0.5 oz./A or lower in areas of fields having a calcareous surface layer and on hilltops/hillsides and other areas which are high in soil pH and very low in organic matter. These rate reductions are to reduce the risk of injury to target and rotational crops. Refer also to tank mixture options and the **Rotational Crops** section of this label.

**Postemergence Tank Mixtures (in all sorghum growing areas)**

Peak may be applied in various tank mixtures for weed control in sorghum: (a) to include a different mode of action herbicide to help prevent or manage resistant weed biotypes; (b) for improved control of weeds not fully controlled by Peak alone; or (c) to control weeds which are larger than the optimum size range in Table 1.

Table 1: Weeds Controlled with Peak Applied Postemergence on Grain Sorghum

Weeds Controlled	Sorghum Tank Mix Rate (0.5 oz/A)	Standard Rate (0.75oz/A)	Enhanced Rate (1.0 oz/A)
	Weed Size Ranges for Optimum Control (inches)		
Amaranth, Palmer ( <i>Amaranthus palmeri</i> )**	1-4*	1-4	1-6
Bindweed, Field ( <i>Convolvulus arvensis</i> )	2-4*	2-6*	2-8*
Bindweed, Hedge ( <i>Calystegia sepium</i> )	1-3*	1-4	1-6
Buckwheat, Wild ( <i>Polygonum convolvulus</i> )***	2-3*	2-4	2-5
Buffalobur ( <i>Solanum rostratum</i> )	1-3*	1-3	1-5
Chamomile, Mayweed ( <i>Anthemis cotula</i> )	1-3	1-4	1-6
Chickweed, Common ( <i>Stellaria media</i> )**	1-3*	1-4*	1-5*
Cocklebur, Common ( <i>Xanthium strumarium</i> )**	2-6	2-10	2-12
Devil's Claw ( <i>Proboscidea louisianica</i> )	2-6	2-8	2-10
Eveningprimrose, Cutleaf ( <i>Oenothera laciniata</i> )	1-4	1-6	1-8
Fiddleneck, Coast ( <i>Amsinckia intermedia</i> )	1-3	1-4	1-6
Flixweed ( <i>Descurainia sophia</i> )	1-6	1-8	1-10
Garlic, Wild ( <i>Allium vineale</i> )	1-8	1-10	1-12
Henbit ( <i>Lamium amplexicaule</i> )	1-2*	1-3*	1-4*
Horseweed (Marestail) ( <i>Conyza canadensis</i> )	1-3*	1-4	1-6
Jimsonweed ( <i>Datura stramonium</i> )	1-4	1-6	1-8
Kochia ( <i>Kochia scoparia</i> )**	1-3*	1-4	1-6
Lambsquarters, Common ( <i>Chenopodium album</i> )	1-3*	1-4	1-5
Lettuce, Prickly ( <i>Lactuca serriola</i> )**	1-4	1-5	1-6
Mallow, Common ( <i>Malva neglecta</i> )	1-3*	1-4*	1-5*
Morningglory, Ivyleaf ( <i>Ipomoea hederacea</i> )	1-3*	1-4*	1-4
Morningglory, Pitted ( <i>Ipomoea lacunosa</i> )	1-3*	1-4*	1-4
Morningglory, Tall ( <i>Ipomoea purpurea</i> )	1-3*	1-3*	1-4*
Mustard, Blue ( <i>Chorispora tenella</i> )	1-6	1-8	1-10
Mustard, Tumble ( <i>Sisymbrium altissimum</i> )	1-6	1-8	1-10
Mustard, Wild ( <i>Brassica kaber</i> )	1-6	1-8	1-10
Pennycress, Field ( <i>Thlaspi arvense</i> )	1-6	1-8	1-10
Pigweed, Redroot ( <i>Amaranthus retroflexus</i> )**	1-3	1-5	1-6
Pigweed, Smooth ( <i>Amaranthus hybridus</i> )**	1-3	1-5	1-6
Puncturevine ( <i>Tribulus terrestris</i> )	1-4	1-6	1-8
Pusley, Florida ( <i>Richardia scabra</i> )	1-3	1-4	1-6
Radish, Wild ( <i>Raphanus raphanistrum</i> )	1-4	1-6	1-8
Ragweed, Common ( <i>Ambrosia artemisiifolia</i> )	2-6	2-10	2-12
Ragweed, Giant ( <i>Ambrosia trifida</i> )	1-3*	1-3	1-4
Sesbania, Hemp ( <i>Sesbania exaltata</i> )	1-3	1-4	1-6
Shepherd's-Purse ( <i>Capsella bursa-pastoris</i> )	1-3	1-4	1-6
Sicklepod ( <i>Cassia obtusifolia</i> )	1-3	1-4	1-5
Sida, Prickly ( <i>Sida spinosa</i> )	1-3*	1-3*	1-5*
Smartweed, Pennsylvania ( <i>Polygonum pennsylvanicum</i> )	1-3	1-4	1-6
Sunflower, Common ( <i>Helianthus annuus</i> )	1-6	1-9	1-12
Tansymustard ( <i>Descurainia pinnata</i> )	1-6	1-8	1-10
Thistle, Canada ( <i>Cirsium arvense</i> )	1-2*	1-4*	1-6*
Thistle, Russian ( <i>Salsola iberica</i> )**	1-2	1-3	1-4
Velvetleaf ( <i>Abutilon theophrasti</i> )****	1-4	1-6	1-9
Waterhemp, Common ( <i>Amaranthus rudis</i> )**	1-3*	1-4	1-5
Waterhemp, Tall ( <i>Amaranthus tuberculatus</i> )**	1-3*	1-4*	1-4

\*Partially controlled or suppressed.

\*\*Certain biotypes of this weed species are known to be resistant to this and other ALS herbicides. Where these ALS-resistant biotypes are known to exist, an appropriate registered herbicide active against that weed and with another mode of action should be used alone or in tank mixture with Peak to control those biotypes.

\*\*\*Spray after true leaves have emerged; earlier applications may result in unacceptable control.

\*\*\*\*For optimum control, include nitrogen in the spray mixture; refer to **Mixing Instructions**.

**Table 2: Number of Peak Water-Soluble Packets Required to Treat Various Acreages at the Recommended Rates**

Acres to Treat	Number of Peak Packets to Use for Broadcast Applications				
	Cereal Tank Mix Rate	Cereal Alone or Tank Mix Rate	Sorghum Tank Mix or Cereal Rate	Sorghum Standard Rate	Sorghum Enhanced Rate
	12 Acres per packet (0.25 oz./A)	8 Acres per packet (0.38 oz./A)	6 Acres per packet (0.5 oz./A)	4 Acres per packet (0.75 oz./A)	3 Acres per packet (1 oz./A)
3					1
4				1	
6			1		2
8		1		2	
9					3
12	1		2	3	4
15					5
16		2		4	
18			3		6
20				5	
24	2	3	4	6	8
30			5		10
40	3	5	7	10	13
60	5	8	10	15	20
80	7	10	13	20	27
120	10	15	20	30	40
160	13	20	27	40	53

**Notes:** (1) One bag of Peak contains 5 water-soluble packets. Each packet treats 3 acres at the Enhanced Sorghum Rate, 4 acres at the Standard Sorghum Rate, and 6-12 acres at the Cereal or Tank Mix Rates. Thus, each bag treats 15 acres at the Enhanced Sorghum Rate, 20 acres at the Standard Sorghum Rate, and 30-60 acres at the Cereal or Tank Mix Rates. (2) For band applications, use proportionately less product.

Refer to Table 3 for recommended tank mixture partners, rates, weeds controlled, weed sizes, additives, and crop stages. The tank mixtures in Table 3 will control the weeds listed in that table when treated at the growth stage recommended, plus the weeds and weed sizes listed in the Standard Rate section of Table 1. Apply Peak in tank mixtures at the 0.5 oz./A tank-mix rate (refer to Table 2), and refer to the **Mixing Instructions** section of this label.

For all tank mixtures of Peak with other herbicides, refer to both labels for weeds controlled and application information; and follow all restrictions and precautions on both labels. For example, if applying Peak in tank mixture with AAtrex or other brands of atrazine, all the restrictions and rate limitations appearing on the AAtrex (atrazine) label must be followed if more restrictive/protective than those on this label.

**Preemergence Applications Alone (in KS and NE only)**

In the states of KS and NE only, Peak may be applied preemergence (during planting or within a few days after planting, but prior to weed or crop emergence) for control or partial control/suppression of many broadleaf weeds in sorghum.

Refer to Table 4 for recommended rates and weeds controlled with pre-emergence applications in sorghum. Then refer to Table 2 for the number of water-soluble packets to treat various acreages with Peak at the selected rate. Also refer to the **Mixing Instructions** section of this label, but the addition of a spray additive is not required for preemergence applications.

**Note:** For effective preemergence activity, enough rainfall or irrigation is needed to wet the soil approximately 2 inches deep before weed emergence.

If for some reason, a second application is desired, the maximum amount of Peak which can be applied is 1 oz./A during the cropping season. A second application may reduce rotational crop options; refer to the Rotational Crops section of this label.

**Preemergence Tank Mixtures (in KS and NE only)**

In the states of KS and NE only, where Peak can be used for preemergence control or partial control/suppression of broadleaf weeds in grain sorghums, Peak can be used in preemergence tank mixtures. For broader spectrum weed control, Peak may be tank mixed with other herbicides registered for preemergence weed control in sorghum, such as Bicep Lite II or Dual II; but note that many of those preemergence grass control products must be applied over Concep®-treated sorghum seed.

Refer to Table 4 for recommended rates and weeds controlled with pre-

emergence applications of Peak in sorghum. Then refer to Table 2 for the number of water-soluble packets to treat various acreages with Peak at the selected rate. Also refer to the **Mixing Instructions** section of this label, but the addition of a spray additive is not required for preemergence applications.

For all tank mixtures of Peak with other herbicides, refer to both labels for weeds controlled and application information; and follow all restrictions and precautions on both labels. For example, if applying Peak in tank mixture with AAtrex or other brands of atrazine, all the restrictions and rate limitations appearing on the AAtrex (atrazine) label must be followed if more restrictive/protective than those on this label.

**Note:** For effective preemergence activity, enough rainfall or irrigation is needed to wet the soil approximately 2 inches deep before weed emergence.

If for some reason, a second application is desired, the maximum amount of Peak which can be applied is 1 oz./A during the cropping season. A second application may reduce rotational crop options; refer to the Rotational Crops section of this label.

**PRECAUTIONS - For all applications of Peak to sorghum**

Follow these precautions to reduce chances of crop injury and/or to avoid reduced weed control:

1. Peak should not be applied to sorghum which is under severe stress due to drought, cold weather, hail, wind damage, sand cutting, flooding, water-logged soil, compacted soil, disease, insect damage, nutrient deficiency (especially low nitrogen or iron levels), or other causes. Also, Peak should not be applied if weeds are under severe stress due to drought or if weeds are taller than the optimum heights listed in Table 1.
2. Do not apply Peak preemergence to early planted sorghum if cool, wet environmental conditions that stress sorghum are expected within 2 weeks after application. Cool, wet weather following Peak applications to sorghum may result in injury to the sorghum; this injury is normally temporary and yields are not affected.
3. If an organophosphate insecticide is applied to sorghum at planting time, do not use Peak preemergence. Do not make a foliar or soil application of any organophosphate insecticide within 15 days before or 10 days after an application of Peak.
4. Application of Peak either preemergence or postemergence to sorghum growing under stress caused by minor element deficiency (e.g., iron) or on highly calcareous soil (above pH 8.2), may result in

crop injury. Applications of Peak to fields where iron chlorosis can occur in sorghum may result in enhanced iron chlorosis symptoms. Such enhanced iron chlorosis symptoms are generally of short duration and yields are not impacted; however, if such symptoms persist, they can be corrected by application of foliar iron fertilizer.

5. Peak can be applied to all grain sorghum hybrids except those susceptible to iron chlorosis which are being grown in areas where insufficient iron is available in the soil. Most inbred lines of sorghum have not been tested for sensitivity to Peak. Therefore, inbred lines must be thoroughly tested for sensitivity to Peak before treating large acreages.
6. Do not sprinkler irrigate within 4 hours after postemergence application of Peak. Rainfall or sprinkler irrigation occurring less than 4 hours after postemergence application may reduce weed control.
7. Do not apply Peak to sorghum that exhibits injury symptoms from a previous herbicide application or other causes.
8. Do not use Peak on sweet sorghum.
9. Observe all precautions and limitations on the label of each product used in tank mixtures with Peak.

**Table 3: Peak Tank Mixtures for Postemergence Weed Control in Grain Sorghum.** Use the Tank-Mix Rate (0.5 oz./A or 1 packet/6 acres) or Standard Rate (0.75 oz./A or 1 packet/4 acres) for Peak and add one of the mixing partners recommended below.

Weed and Recommended Size (inches) <sup>1</sup>	Tank Mix Partner and Rate	Recommended Additive <sup>3</sup>	Sorghum Height Range (inches)
Canada Thistle (1-6) <sup>2</sup> Other Thistles (1-6) <sup>2</sup> Field Bindweed (2-8) <sup>2</sup> Hemp Dogbane (3-15) <sup>2</sup>	Banvel 1/4-1/2 pt./A or 2,4-D 1/4-1/2 pt./A 4EC	NIS NIS	5-10, or 8-15 directed 5-8, or 8-24 directed
Cocklebur (2-12) Kochia (1-6 or areas with ALS resistance) Lambsquarters (1-6 or heavy infestations) Morningglories (1-5) Nightshades (1-5) Pigweeds/Carelessweed Palmer Amaranth, and Waterhemp (1-8 or ALS resistant) Velvetleaf (1-10)	AAtrex (atrazine) <sup>4</sup> 3/4-1 qt./A 4L or Banvel 1/4-1/2 pt./A or Buctril 1/2-1 pt./A or Buctril+atrazine <sup>4</sup> 1-2 pt./A or Marksman <sup>4</sup> 1-2 pt./A or 2,4-D 1/4-1/2 pt./A 4EC	COC NIS NIS NIS NIS NIS	5-12, or 8-12 directed 5-10, or 8-15 directed 5-12, or 8-24 directed 5-12, or 8-12 directed 5-8, or 8-12 directed 5-8, or 8-24 directed

<sup>1</sup>Recommended weed sizes for optimum control.

<sup>2</sup>Partially controlled or suppressed.

<sup>3</sup>NIS = Nonionic Surfactant or COC = Crop Oil Concentrate; nitrogen may also be added where COC is recommended; refer to **Mixing Instructions** section of this label.

<sup>4</sup>Do not use AAtrex (atrazine) on sand or loamy sand soils. Mixtures with AAtrex (atrazine) or pre-mixes containing atrazine may result in some reduction in control (antagonism) on cocklebur, sunflower, and velvetleaf.

**Table 4: Weeds Controlled (C) or Partially Controlled/Suppressed (P) With Peak Applied Preemergence on Sorghum**

	Rate of Peak	
	0.75 oz./A	1.0 oz./A
Amaranth, Palmer ( <i>Amaranthus palmeri</i> )*	C	C
Buffalobur ( <i>Solanum rostratum</i> )	C	C
Carpetweed ( <i>Mollugo verticillata</i> )	C	C
Cocklebur, Common ( <i>Xanthium strumarium</i> )*	P	P
Copperleaf, Hophornbeam ( <i>Acalypha ostryifolia</i> )	C	C
Devil's Claw ( <i>Proboscidea louisianica</i> )	C	C
Kochia ( <i>Kochia scoparia</i> )*	C	C
Lambsquarters, Common ( <i>Chenopodium album</i> )	C	C
Morningglory, Ivyleaf ( <i>Ipomoea hederacea</i> )	P	P
Morningglory, Pitted ( <i>Ipomoea lacunosa</i> )	P	P
Morningglory, Tall ( <i>Ipomoea purpurea</i> )	P	P
Morningglory, Smallflower ( <i>Jacquemontia tamnifolia</i> )	P	C
Mustard, Wild ( <i>Brassica kaber</i> )	C	C
Pigweed, Smooth ( <i>Amaranthus hybridus</i> )*	C	C
Pigweed, Redroot/Carelessweed ( <i>A. retroflexus</i> )*	C	C
Puncturevine ( <i>Tribulus terrestris</i> )	C	C
Purslane, Common ( <i>Portulaca oleracea</i> )	C	C
Purslane, Horse ( <i>Trianthema portulacastrum</i> )	C	C
Radish, Wild ( <i>Raphanus raphanistrum</i> )	C	C
Ragweed, Common ( <i>Ambrosia artemisiifolia</i> )	C	C
Ragweed, Giant ( <i>Ambrosia trifida</i> )	P	C
Sesbania, Hemp ( <i>Sesbania exaltata</i> )	P	P
Sicklepod ( <i>Cassia obtusifolia</i> )	P	C
Sida, Prickly ( <i>Sida spinosa</i> )	C	C
Smartweed, Pennsylvania ( <i>Polygonum pensylvanicum</i> )	C	C
Sunflower, Common ( <i>Helianthus annuus</i> )	C	C
Velvetleaf ( <i>Abutilon theophrasti</i> )	P	P
Waterhemp, Common ( <i>Amaranthus rudis</i> )*	C	C
Waterhemp, Tall ( <i>Amaranthus tuberculatus</i> )*	C	C

\*Certain biotypes of this weed species are known to be resistant to this and other ALS herbicides. Where ALS resistant biotypes are known to exist, an appropriate registered herbicide active against that weed and with another mode of action should be used alone or in tank mixture with Peak to control those biotypes.

**Pigweed, Amaranth, and Waterhemp Control Program for Grain Sorghum:** Since various pigweed related species, including redroot pigweed, Palmer amaranth, common waterhemp, tall waterhemp, and others, are prolific seed producers, have long germination periods, have ALS-resistant biotypes, and have become problem weeds in certain areas, the following three-step program for control of heavy infestations of these weeds is recommended: (1) Apply Bicep II®, Bicep Lite II®, or

Dual II® preemergence at the recommended rate for that soil, over Concep-treated sorghum seed. If weeds have emerged prior to the application of Bicep II, Bicep Lite II, or Dual II, control those weeds with tillage or a burndown herbicide. (2) Apply a postemergence tank mixture of Peak® plus AAtrex (atrazine), or Banvel, or Marksman when the pigweed, amaranth, or waterhemp plants are 1-8 inches tall (not taller). Refer to Table 3 for additional information regarding timings, rates, and additives for these tank mixtures. (3) If needed, cultivate 1-3 weeks after the postemergence application. In addition to controlling pigweeds, waterhemp, and related species, this program is also effective in controlling most other weeds common in grain sorghum.

---

**Small Grain Cereals (Wheat, Barley, Rye, Oats, and Triticale) and Proso Millet**

---

Peak controls many broadleaf weeds in small grain cereals, including winter wheat, spring wheat, winter barley, spring barley, rye, oats, and triticale; as well as proso millet. This product should not be used where small grains are underseeded with legumes, or the legumes may be severely injured or killed.

**Table 5: Weeds Controlled by Peak Applied Postemergence in Small Grain Cereals and Proso Millet**

Weeds Controlled	Cereal and Proso Millet Rates	
	0.38 oz./A	0.5 oz./A
	Weed Size Ranges for Optimum Control (inches)	
Amaranth, Palmer ( <i>Amaranthus palmeri</i> )**	1-3*	1-3*
Bindweed, Field ( <i>Convolvulus arvensis</i> )	2-3*	2-4*
Bindweed, Hedge ( <i>Calystegia sepium</i> )	1-3*	1-3*
Buckwheat, Wild ( <i>Polygonum convolvulus</i> )***	2-3*	2-3
Buffalobur ( <i>Solanum rostratum</i> )	1-3	1-4
Chamomile, Mayweed ( <i>Anthemis cotula</i> )	1-3	1-3
Chickweed, Common ( <i>Stellaria media</i> )**	1-3*	1-3*
Cocklebur, Common ( <i>Xanthium strumarium</i> )**	2-4	2-6
Eveningprimrose, Cutleaf ( <i>Oenothera laciniata</i> )	1-3	1-4
Fiddleneck, Coast ( <i>Amsinckia intermedia</i> )	1-3	1-3
Flixweed ( <i>Descurainia sophia</i> )	1-4	1-6
Garlic, Wild ( <i>Allium vineale</i> )	1-6****	1-8****
Henbit ( <i>Lamium amplexicaule</i> )	1-2*	1-2*
Kochia ( <i>Kochia scoparia</i> )**	1-3*	1-3*
Lambsquarters, Common ( <i>Chenopodium album</i> )	1-3*	1-3*
Lettuce, Miner's ( <i>Montia perfoliata</i> )	1-4	1-6
Lettuce, Prickly ( <i>Lactuca serriola</i> )**	1-3	1-4
Mallow, Common ( <i>Malva neglecta</i> )	1-2*	1-3*
Mustard, Blue ( <i>Chorispora tenella</i> )	1-4	1-6
Mustard, Tumble ( <i>Sisymbrium altissimum</i> )	1-4	1-6
Mustard, Wild ( <i>Brassica kaber</i> )	1-5	1-6
Pennycress, Field ( <i>Thalspi arvense</i> )	1-4	1-6
Pigweed, Redroot ( <i>Amaranthus retroflexus</i> )**	1-3*	1-3
Pigweed, Smooth ( <i>Amaranthus hybridus</i> )**	1-3*	1-3
Pineapple-weed ( <i>Matricaria matricarioides</i> )	1-4	1-6
Radish, Wild ( <i>Raphanus raphanistrum</i> )	1-3	1-4
Ragweed, Common ( <i>Ambrosia artemisiifolia</i> )	2-5	2-6
Shepherd's Purse ( <i>Capsella bursa-pastoris</i> )	1-2	1-3
Sunflower, Common ( <i>Helianthus annuus</i> )	1-4	1-6
Tansymustard ( <i>Descurainia pinnata</i> )	1-4	1-6
Thistle, Canada ( <i>Cirsium arvense</i> )	1-2*	1-2*
Thistle, Russian ( <i>Salsola iberica</i> )**	1-2*	1-2
Wallflower, Bushy ( <i>Erysimum repandum</i> )	1-3	1-4

\*Partially controlled or suppressed.

\*\*Certain biotypes of this weed species are known to be resistant to this and other ALS herbicides. Where these ALS-resistant biotypes are known to exist, an appropriate registered herbicide active against that weed and with another mode of action should be used alone or in tank mixture with Peak to control those biotypes.

\*\*\*Spray after true leaves have emerged; earlier applications may result in unacceptable control.

\*\*\*\*Wild Garlic is controlled at 0.25-0.5 oz./A. Use the 0.5 oz./A rate when added soil residual control is desired or control of other weeds listed in this table is desired.

## Postemergence Application Alone

Postemergence application should be made to small grain cereals and proso millet at the rate and timings recommended in Table 5. If weeds are larger than the optimum size range recommended, only partial control may be obtained.

Peak may be applied postemergence over-the-top to actively growing small grain crops or proso millet from the 3-leaf stage of the crop to before the second node is detectable in stem elongation (Feekes Growth Stage 7). Within that broad window of application, it is more important to time applications to the optimum weed heights listed in Table 5, rather than crop stage. Applications made to small grain cereals or proso millet before the 3-leaf stage increase the likelihood of crop injury. In drier climates, crop oil concentrate (COC) is the preferred additive, instead of nonionic surfactant, when applying Peak alone with water as the carrier.

Refer to Table 2 for the number of water-soluble packets to treat various acreages with Peak at the selected rate and refer to the **Mixing Instructions** section.

**Note:** Refer to the **Rotational Crops** section for additional restrictions.

## Postemergence Tank Mixtures

Peak may be applied in various tank mixtures for weed control in small grain cereals: (a) to include a different mode of action herbicide to help prevent or manage resistant weed biotypes; (b) for improved control of weeds not fully controlled by Peak alone; (c) to control weeds which are larger than the optimum size range in Table 5; or (d) to control grass weeds.

Refer to Table 6 for recommended broadleaf tank mixture partners, rates, weeds controlled, weed sizes, additives, and crop stages. The tank mixtures in Table 6 will control the broadleaf weeds listed in that table when treated at the growth stage recommended, plus the weeds and weed sizes listed in Table 5. Apply Peak in tank mixtures at the 0.25-0.5 oz./A tank-mix rate (refer to Table 2), and refer to the **Mixing Instructions** section of this label.

Peak may also be applied at 0.25-0.5 oz./A in tank mixtures with cereal herbicides which control grasses; including Assert®, Avenge®, Dakota®, Hoelon®, or Tiller®.

For all tank mixtures of Peak with other herbicides, refer to both labels for weeds controlled, additives recommended, and application information; and follow all restrictions and precautions on both labels.

If a second application is desired, the maximum amount of Peak which

can be applied is 1 oz./A during the cropping season.

**PRECAUTIONS - For all applications of Peak to small grain cereals and proso millet**

Follow these precautions to reduce chances of crop injury and/or to avoid reduced weed control:

1. Peak should not be applied to small grain or proso millet crops which are under severe stress due to drought, cold weather, hail, wind damage, sand cutting, flooding, water-logged soil, compacted soil, disease, insect damage, nutrient deficiency, or other causes. Also, Peak should not be applied if weeds are under severe stress due to drought or if weeds are taller than the optimum heights listed in Table 5.

---

2. Do not apply Peak to small grain cereals or proso millet if cold, wet environment conditions that stress wheat are expected within 1 week after application. Cold, wet weather following Peak applications to small grains may result in injury to the cereal crop; this injury is normally temporary and yields are not affected.
3. Do not make a foliar or soil application of any organophosphate insecticide within 15 days before or 10 days after an application of Peak.
4. Do not sprinkler irrigate within 4 hours after application of Peak. Rainfall or sprinkler irrigation occurring less than 4 hours after application may reduce weed control.
5. Do not apply Peak to small grains that exhibit injury symptoms from a previous herbicide application or other causes.
6. Observe all precautions and limitations on the label of each product used in tank mixtures with Peak.

**Table 6: Peak Tank Mixtures for Postemergence Control of Broadleaf Weeds in Small Grain Cereals. Use the Cereal or Lower Tank-Mix Rate for Peak (0.25-0.5 oz./A or 1 packet/6-12 acres) and add one of the mixing partners listed below.**

Weed and Recommended Size (inches) <sup>1</sup>	Mix Partner and Rate	Recommended Additive <sup>3</sup>	Small Grains and Stage of Application
Canada Thistle (1-6) <sup>2</sup> Other Thistles (1-6) <sup>2</sup> Field Bindweed (2-8) <sup>2</sup>	Banvel 2-4 oz./A	NIS	Wheat, Barley = 3-leaf until second node detectable; Oats = 3-leaf through 4-leaf stage
	or Banvel SGF 4-8 oz./A	NIS	Wheat, Barley = 3-leaf until second node detectable; Oats = 3-leaf through 4-leaf stage
	or 2,4-D 8-12 oz./A 4EC	NIS	Wheat, Barley = tillering and until second node detectable; Rye = well tillered and until second node detectable
	or Banvel 2-3 oz./A +2,4-D 8 oz./A	NIS	Wheat = tillering and before crop exceeds 5-leaf stage
Kochia (1-6) Lambsquarters (1-6 or heavy infestations) Morningglories (1-5) Pigweeds (1-8)	Banvel 2-4 oz./A	NIS	Wheat, Barley = 3-leaf until second node detectable; Oats = 3-leaf through 4-leaf stage
	or Banvel SGF 4-8 oz./A	NIS	Wheat, Barley = 3-leaf until second node detectable; Oats = 3-leaf through 4-leaf stage
	or Bronate 3/4-1 1/2 pts./A	NIS	Wheat, Barley, Oats, Rye = 3-leaf until second node detectable
	or Buctril 3/4-1 1/2 pts./A	NIS	Wheat, Barley, Oats, Rye, Triticale = 3 leaf until second node detectable
	or MCPA <sup>4</sup> 8-12 oz./A 4EC	NIS	Wheat, Barley, Oats = 3-leaf until second node detectable; Rye = 4-leaf until second node detectable
	or 2,4-D 8-12 oz./A 4EC	NIS	Wheat, Barley = tillering and until second node detectable; Rye = well tillered and until second node detectable
	or Banvel 2-3 oz./A +2,4-D 8 oz./A	NIS	Wheat = tillering and before crop exceeds 5-leaf stage
	or Sencor® DF 1/3-2/3 lb./A, or Sencor 4 1/2-1 pt./A	NIS	Winter Wheat, Barley = specific varieties; refer to Sencor label

- <sup>1</sup>Recommended weed sizes for optimum control.
- <sup>2</sup>Partially controlled or suppressed.
- <sup>3</sup>NIS = Nonionic Surfactant; refer to **Mixing Instructions** section of this label.
- <sup>4</sup>MCPA usually does not control kochia.

---

**Crop Failure**

---

If a crop treated with Peak is lost due to a natural catastrophe such as hail or frost; an IR or IMR field corn hybrid or a small grain cereal crop (wheat, barley, rye, oats, or triticale) may be replanted immediately. Normal field corn or grain sorghum may be replanted, but not until one month or more after application. For control of weeds in a replanted crop, Peak may be applied a second time only if the total Peak applied during the cropping season does not exceed 1 oz./Acre.

---

**Rotational Crops Following Applications of Peak**

---

Rotational crops may be planted according to the minimum intervals and restrictions shown in the following tables. For a given geographical area and rotational crop, planting before the minimum interval or exceeding the restrictions regarding maximum rate, maximum soil pH, or latest application date may result in injury to the rotational crop and/or illegal residues. For rotational crop restrictions when Peak is used in tank mixtures, refer to the rotational crop intervals in the following tables for Peak and to the respective product label of any mixing partner for additional restrictions, and use the longest interval.

**Red River Valley area of MN and ND**

Rotational Crop	Minimum Plant Back Interval	Restrictions:		
		Do Not Apply More Than (Maximum Rate in oz./A)	Only Apply on Soil with pH	Make Application Before
Wheat, Barley, Rye Oats, Triticale, and IR or IMR Field Corn	None	0.5	below 7.8	see use recommendations
Normal Field Corn, Sorghums, Proso Millet	1 month	0.38	below 7.8	see use recommendations
Popcorn, Sweet Corn, Rice, Peas, Forage Grasses, STS™ Soybeans*	10 months	0.25	below 7.8	July 10
Soybeans, Dry Beans, Green Beans, Peanuts, Cotton, Tobacco	22 months	0.25	below 7.8	July 10
Cabbage, Canola, Tomatoes, Flax, Lentils	22 months	0.25	below 7.5	July 1
All other crops	Do not apply Peak if you intend to plant these crops within the next 3 years			

\*STS soybeans which have enhanced tolerance to certain sulfonylurea herbicides.

General restrictions for the Red River Valley area of MN and ND

- Do not apply more than 0.5 oz./A of Peak
- Do not apply Peak on soils with pH 7.8 or higher

**Pacific Northwest (ID, OR, WA)**

Rotational Crop	Minimum Plant Back Interval	Restrictions:		
		Do Not Apply More Than (Maximum Rate in oz/A)	Only Apply on Soil with pH	Make Application Before
Wheat, Barley, Rye Oats, Triticale, and IR or IMR Field Corn	None	1	no restriction	see use recommendations
Normal Field Corn, Sorghums, Proso Millet	1 month	0.75	below 7.8	see use recommendations
Grasses Grown for Seed	4 months	0.5	below 7.8	June 15
Popcorn, Sweet Corn, Rice, Peas, Forage Grasses, STS Soybeans*	10 months	0.5	below 7.8	July 1
Soybeans, Dry Beans, Garbanzos, Green Beans, Peanuts, Tobacco	10 months	0.5	below 7.5	June 15
Cabbage, Canola, Tomatoes, Flax, Lentils	10 months	0.5	below 7.0	June 15
Clovers, Alfalfa, Potatoes	15 months	0.5	below 7.0	May 15
Sunflowers, Sugarbeets, Leeks, and Onions	22 months	0.5	below 7.2	May 15
All other crops	18 months	0.5	below 7.2	May 15

\*STS soybeans which have enhanced tolerance to certain sulfonylurea herbicides.

**General restrictions for the Pacific Northwest**

\*Do not rotate to green beans, cabbage, canola, tomatoes, flax, or lentils unless 6" of rainfall or irrigation is received within 6 months after application of Peak and the soil is tilled to a minimum of 4" deep prior to seeding the rotational crop.

### All Other Areas North of Interstate 80

Rotational Crop	Minimum Plant Back Interval	Restrictions:		
		Do Not Apply More Than (Maximum Rate in oz./A)	Only Apply on Soil with pH	Make Application Before
Wheat, Barley, Rye Oats, Triticale, and IR or IMR Field Corn	None	0.75	no restriction	see use recommendations
Normal Field Corn, Sorghums, Proso Millet	1 month	0.75	no restriction	see use recommendations
Popcorn, Sweet Corn, Rice, Peas, Forage Grasses, STS Soybeans*	10 months	0.5	below 7.8	July 10
Soybeans, Dry Beans, Green Beans, Peanuts, Tobacco	10 months	0.5	below 7.2	July 1
Cabbage, Canola, Tomatoes, Flax, Lentils	11 months	0.5	below 7.2	July 1
Clovers, Alfalfa	15 months	0.38	below 7.2	July 10
Potatoes, Sunflowers, Sugar Beets, Leeks, Onions	22 months	0.38	below 7.5	July 10
All other crops	18 months	0.38	below 7.2	July 10

\*STS soybeans which have enhanced tolerance to certain sulfonylurea herbicides.

General restrictions for all other areas north of Interstate 80

- Do not apply more than 0.75 oz./A of Peak
- Do not rotate to soybeans, dry beans, green beans, peanuts, tobacco, cabbage, canola, tomatoes, flax, or lentils if there is less than 10" of rainfall or irrigation during the 5 months after application of Peak

**All Areas South of Interstate 80**

Rotational Crop	Minimum Plant Back Interval	Restrictions:		
		Do Not Apply More Than (Maximum Rate in oz./A)	Only Apply on Soil with pH	Make Application Before
Wheat, Barley, Rye Oats, Triticale, and IR or IMR Field Corn	None	1	no restriction	see use recommendations
Normal Field Corn, Sorghums, Proso Millet	1 month	1	no restriction	see use recommendations
Popcorn, Sweet Corn, Rice, Peas, Forage Grasses, STS Soybeans*	10 months	1	below 7.8	July 10
Soybeans, Dry Beans, Garbanzos, Green Beans, Peanuts, Cotton, Tobacco	10 months	0.75	below 7.8	July 10
Cabbage, Canola, Tomatoes, Flax, Lentils	10 months	0.5	below 7.5	July 10
Clovers, Alfalfa	15 months	0.5 (0.38 in west TX, western OK, NM and AZ)	below 7.5	July 10
Potatoes, Sunflowers, Sugar Beets, Leeks, Onions	22 months	0.5	below 7.5	July 10
All other crops	18 months	0.5	below 7.5	July 10

\*STS soybeans which have enhanced tolerance to certain sulfonylurea herbicides.

General restrictions for all areas south of Interstate 80

- Do not rotate to soybeans, dry beans, green beans, peanuts, cotton, tobacco, cabbage, canola, tomatoes, flax, or lentils if there is less than 10" of rainfall or irrigation within 5 months after application of Peak.

Exception - In MS, LA, AR, and southern and eastern TX, including South Texas, the Lower Rio Grande Valley, the Coastal Bend, and the Blacklands; cotton, rice, STS soybeans which have enhanced tolerance to certain sulfonylurea herbicides, normal soybeans, dry beans, and peanuts can be planted on all soils (at least 10 months after application) provided there are at least 10 inches of rainfall or irrigation during the 6 months after application of Peak.

## **Storage and Disposal**

### **Pesticide Storage and Disposal**

#### **Storage**

Store in a cool, dry place. Do not store this product under wet conditions. Handle outer bag carefully to avoid breakage of inner soluble packets.

#### **Pesticide Disposal**

Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Open dumping is prohibited. Wastes resulting from the use of this product are toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office.

#### **Container Disposal**

Do not reuse outer bag. Dispose of outer bag in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

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.

### **Precautionary Statements**

#### **Hazards to Humans and Domestic Animals**

#### **CAUTION**

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

#### **Statement of Practical Treatment**

**If in eyes:** Flush eyes with plenty of water. Get medical attention if irritation persists.

**If swallowed:** Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger.

Do not induce vomiting or give anything by mouth to an unconscious person.

**If on skin:** Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

**Note to Physician:** If ingested, induce emesis or lavage stomach. Treat symptomatically.

**Personal Protective Equipment**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining Personal Protective Equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Control Statements**

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.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**Environmental Hazards**

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

AAtrex®, Accu-Pak®, Bicep II®, Bicep Lite II®, Concep®, Dual II®, and Peak® trademarks of Novartis

Assert® and Avenge® trademarks of American Cyanamid Company

STS™ trademark of E. I. duPont de Nemours and Company, Inc.

Banvel®, Banvel SGF®, and Marksman® trademarks of Sandoz Ltd.

Bronate® and Buctril® trademarks of Rhône-Poulenc Ag Company

Dakota®, Hoelon®, and Tiller® trademarks of AgrEvo USA Company

Clorox® trademark of the Clorox Company

Sencor® trademark of Bayer AG

©1997 Novartis

Novartis Crop Protection, Inc.  
Greensboro, North Carolina 27419

NCP (DRAFT FOR JOE PEEK)

[QUARK/PEAK/PEAK-ACCU-PAK-C] - ccg - 3/27/97

Base Label

Accu-Pak®

Peak®

HERBICIDE

For weed control in grain sorghum (milo), wheat, barley, rye, oats, triticale, and proso millet

Active Ingredient:

Prosulfuron: 1-(4-methoxy-6-methyl- triazin-2-yl)-3-[2-(3,3,3-trifluoropropyl)- phenylsulfonyl]-urea	.57.0%
--	--------

Inert Ingredients:	43.0%
--------------------	-------

Total:	100.0%
--------	--------

Peak is water-dispersible granules.

5 x 3 Oz. Water-Soluble Packets

15 Oz.

Total Net Weight

EPA Reg. No. 100-763

EPA Est. 100-LA-1

EPA Est. 100-FRA-001

Made in France

NCP (DRAFT FOR JOE PEEK)

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.**

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

**Precautionary Statements**

**Hazards to Humans and Domestic Animals**

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

**Statement of Practical Treatment**

**If in eyes:** Flush eyes with plenty of water. Get medical attention if irritation persists.

**If swallowed:** Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

**If on skin:** Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

**Note to Physician:** If ingested, induce emesis or lavage stomach. Treat symptomatically.

**Environmental Hazards**

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Accu-Pak® and Peak® trademarks of Novartis

©1997 Novartis

Novartis Crop Protection, Inc.  
Greensboro, North Carolina 27419

NCP (DRAFT FOR JOE PEEK)

[QUARK/PEAK/PEAK-ACCU-PAK-C] - ccg - 3/27/97