

U.S. LABEL

Reason to Issue: Revise labeling for cereals (barley and wheat) to improve readability and to consolidate claims.

Date of Draft: 12/7/90 (Pre-Reg)(H)

10/17/90 Draft: Revise according to internal review comments. 12/7/90 Draft: Revise according to regional comments.

EPA Reg. No. 3125-402

SENCOR® SOLUPAK™
75% Dry Flowable Herbicide

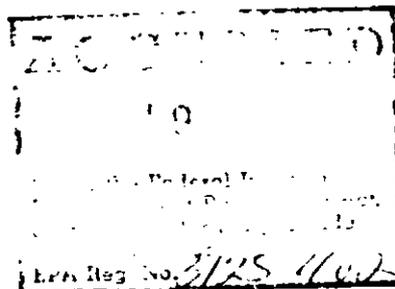
ACTIVE INGREDIENT:

4-Amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one 75%

INERT INGREDIENTS: 25%
100%

AMENDMENT TO CURRENTLY REGISTERED LABELING

REVISE TO READ AS FOLLOWS:



CEREALS

(Barley and Wheat)

For suppression or control of certain grass and broadleaf weeds, apply SENCOR SOLUPAK herbicide postemergence to barley (Winter and Spring) and Winter wheat (see the appropriate section of this label for geographic limitations):

- A. Barley (Spring and Winter) and Winter Wheat in Idaho, Montana, Nevada, Oregon, Utah, and Washington.
- B. Dryland (Non-irrigated) Winter wheat in Kansas, Oklahoma, & Texas.
- C. Dryland (Non-irrigated) Winter wheat only (Arkansas, Georgia, Kentucky, Louisiana, Mississippi, & Tennessee)

Mixing

See the "General Information" section in the front of this label for specific mixing procedures. Do not tank mix SENCOR SOLUPAK with pesticides other than those specified below. When tank-mixing, carefully follow the instructions on this label. Refer to the other product label registered for use on barley and wheat for additional directions, rates, weeds controlled and restrictions.

Application

Refer to the "General Information" section in the front of this label for detailed information on the application of SENCOR SOLUPAK. Do not exceed the rates specified below.

Apply SENCOR SOLUPAK when crop is healthy and actively growing. Weed control may not be observed for 2 to 4 weeks after application; under very dry conditions, weed control may not be apparent for 4 to 6 weeks. Moisture (at least 1/2 inch) is needed within 2 to 3 weeks after application to move SENCOR into the weed root zone. Lack of adequate moisture after application may result in poor control. Control or suppression of listed weeds is dependent on weed size. Control or suppression can be reduced if broadleaf weeds are taller than 1 inch or grasses have more than 2 leaves.

If SENCOR SOLUPAK is applied more than once per crop season, allow at least 45 days between applications.

SENCOR SOLUPAK may be tank mixed with Ally, Finesse, Glean, Harmony, Harmony Extra, 2,4-D, MCPA, Igran, Banvel, Bronate, or Buctril herbicides. Refer to the other product labels registered for use on cereals for additional directions, rates, and weed species controlled. Observe all cautions and limitations on labeling of all products used in mixtures.

Grazing and Harvesting Treated Crops

Wheat may be grazed 14 days following application, but do not harvest grain within 21 days after last application. Do not graze or harvest barley before crop maturity.

SPECIAL PRECAUTIONS (Cereals)

Crop injury may occur if SENCOR SOLUPAK is applied:

1. When the crop is under stress such as Winter kill, frost damage, disease, drought or excessive moisture, or when these conditions follow the application.
2. In combination with fluid fertilizer.
3. Prior to the growth stage specified on this label.
4. To soils high in lime or sodium, a pH greater than 7.7, calcareous, gravelly, thinly covered or exposed subsoil areas.
5. Temporary chlorosis may occur after application to wheat, especially if frost occurs.

A. BARLEY AND WINTER WHEAT

Idaho, Montana, Nevada, Oregon, Utah, and Washington

SENCOR SOLUPAK herbicide is recommended for post-emergence application in Winter and Spring barley and Winter wheat.

Varieties approved for use of SENCOR herbicide include: Winter Wheat: Basin, Batum, Centurk, Cheyenne, Daws, Dusty, Faro, Gaines, Hatton, Hill 81, Hyak, Hyslop, Lewjain, Luke, Madsen, Malcom, McDermid, Moro, Nugaines, Paha, Peck, Sprague, Stephens, Tyee, Anser, Weston, and Winalta.

Barley: Advance, Boyer, Clark, Compana, Hannchen, Hector, Hesk, Hudson, Lud, Luther, Kamiak, Klages, Olympic, Pirolina, Steptoe and Triumph.

The following varieties have proven to be sensitive to SENCOR and should not be treated: Winter Wheat: Vona, Wings, Winridge, and Yamhill. Avoid use on Spring wheat and Durum wheat varieties.

Barley: Glenn, Morex, Moravian 3, Larker, Summit, Bracken, Anheuser Busch B2601 and varieties with Morex parentage.

Varieties not listed: To avoid possible crop injury, contact a Mobay representative or herbicide expert for a recommendation before treating any unlisted variety.

Weeds Controlled:

Broadleaves

Annual Polemonium (Jacob's Ladder)
 (Polemonium micranthum)
 Chickweed, Common
 (Stellaria media)
 Conical Catchfly
 (Silene conica)
 Corncockle
 (Agrostemma githago)
 Tarweed, Fiddleneck
 (Amsinckia lycopsoides)
 Gromwell
 (Lithospermum officinale)
 Henbit
 (Lamium amplexicaule)
 Ivyleaf Speedwell
 (Veronica hederifolia)
 Knotweed, Prostrate
 (Polygonum aviculare)
 Lambsquarters, Common
 (Chenopodium album)
 Madwort (Catchweed)
 (Asperugo procumbens)

Mayweed (dog fennel)
 (Eupatorium capillifolium)
 Miners Lettuce
 (Claytonia perfoliata)
 Mustard, Jim Hill (tumble)
 (Sisymbrium altissimum)
 Mustard, Wild
 (Brassica kaber)
 Pennycress, Field
 (Thlaspi arvense)
 Pineappleweed
 (Matricaria matricarioides)
 Prickly Lettuce
 (Lactuca serriola)
 Pigweeds, Annual
 (Amaranthus spp.)
 Redstem Filaree
 (Erodium cicutarium)
 Shepherdspurse
 (Capsella bursa-pastoris)

Weeds Suppressed: Control of these weeds varies from poor to excellent depending on timing of application, stage of growth at the time of application, temperatures, and soil moisture conditions following treatment. For maximum effect on these weeds use the highest recommended rate for growth stage, soil texture, and percent organic matter. Suppression is a reduction in weed size and growth compared to a non-treated area in the same field.

Broadleaves

Cowcockle
 (Vaccaria pyramidata)
 Kochia
 (Kochia scoparia)
 Mustard, Tansy
 (Descurainia pinnata)
 Russian Thistle
 (Salsola iberica)
 Wild Buckwheat
 (Polygonum convolvulus)

Grasses

Blackgrass (Black twitchgrass)
 (Lolopurus myosuroides)
 Bluegrass, Annual
 (Poa annua)
 Bluegrass, Bulbous
 (Poa bulbosa)
 Cheatgrass
 (Bromus tectorum)
 Downy Brome
 (Bromus cecalinus)
 Foxtails
 (Setaria spp.)
 Rescuegrass
 (Bromus catharticus)
 Ripgut Brome
 (Bromus diandrus)
 Ryegrass, Italian
 (Lolium multiflorum)
 Wild Barley
 (Hordeum leporinum)
 Wild Oats
 (Avena fatua)
 Windgrass
 (Apera spica-venti)

SENCOR SOLUPAK Herbicide

RECOMMENDED APPLICATIONS

SPRING AND WINTER BARLEY - WINTER WHEAT

(Idaho, Montana, Nevada, Oregon, Utah and Washington)

SOIL TYPE ^{1/}	OUNCES SENCOR SOLUPAK/Acre			
	2-Leaf - 4 Tiller ^{2/}		>4 Tillers ^{3/}	
	% Organic Matter		% Organic Matter	
	0.75 - 2.0	>2.0	0.75 - 2.0	>2.0
COARSE (Sandy loam, loamy sand)	1-2	1-3	4-6	5-8
MEDIUM (Loam, silt loam, sandy clay, sandy clay loam)	1-3	2-3	4-8	5-8
FINE (Silty clay, silty clay loam, clay, clay loam)	2-3	2-4	5-8	8-10 2/3

^{1/} Do not use on soils containing less than 0.75% organic matter.

^{2/} Use these rates on crops with secondary roots smaller than 1 inch. Use only in combination with other herbicides listed under "Application" for early season control of broadleaf weeds and suppression of downy brome.

^{3/} Use only when plants have more than 4 tillers and after secondary roots have developed and are larger than 1 inch in length.

Do not apply more than a total of 8 ounces active ingredient, regardless of formulation, per acre per year.

On irrigated cereals, do not apply more than 1/2 inch of water for the first irrigation; the maximum amount for each additional irrigation should not exceed 1 inch. Allow at least 14 days between the first irrigation following treatment and subsequent irrigations.

B. DRYLAND (NON-IRRIGATED) WINTER WHEAT

Kansas, Oklahoma and Texas

FOR USE ONLY ON THE VARIETIES GARST 64, HAWK, LARNED, NEWTON, PIONEER 2157, STALLION, TAM W101, TAM 105, VICTORY, AND WRANGLER.

Weeds Controlled:

Broadleaves

Annual Polemonium (Jacob's Ladder)
 (Polemonium micranthum)
 Chickweed, Common
 (Stellaria media)
 Tarweed, Fiddleneck
 (Amsinckia lycopsoides)
 Henbit
 (Lamium amplexicaule)
 *Kochia
 (Kochia scoparia)
 Lambsquarters
 (Chenopodium album)
 *Mustard, Blue
 (Chorispora tenella)
 *Mustard, Jim Hill
 (Sisymbrium altissimum)
 *Mustard, Wild
 (Brassica kaber)
 Pigweeds
 (Amaranthus spp.)

Grasses

*Cheatgrass
 (Bromus secalinus)
 *Downy Brome
 (Bromus tectorum)
 *Foxtails
 (Setaria spp.)
 *Rescuegrass
 (Bromus catharticus)

*For control of these weeds, use the highest rate recommended for soil texture and percent organic matter.

Hard to Control Weeds: *Italian ryegrass (Lolium multiflorum), *wild oats (Avena fatua), and *wild buckwheat (Polygonum convolvulus).

NOTE: Control of these weeds may be variable, ranging from poor to excellent depending on timing of application, stage of growth at time of application, temperatures and soil moisture conditions following treatment.

SENCOR SOLUPAK Herbicide

RECOMMENDED BROADCAST APPLICATIONS

SOIL TEXTURE	SENCOR SOLUPAK Pounds Per Acre				REMARKS
	%Organic Matter ^{1/}				
	Fall		Spring		
COARSE (Sandy loam, loamy sand)	1 to 2% 1/3	Over 2% 1/3	1 to 2% 1/3	Over 2% 1/3 to 1/2	Apply specified dosage per acre with aerial or ground spray equipment as a broadcast post-emergence spray. For Fall or Spring application, refer to "Application" in the beginning of this cereals section for information or timing of application and growth restrictions.
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/3 to 1/2	1/2	1/2 to 2/3	1/2 to 5/6	
FINE (Silty clay, silty clay loam ^{2/} , clay, clay loam)	1/2	1/2 to 2/3	1/2 to 5/6	2/3 to 1	

^{1/} Do not use on any soils containing less than 1% organic matter.

^{2/} Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

SENCOR in Combination with Other Herbicides:

SENCOR may be applied as directed above or may be tank mixed with those herbicides listed under "Application."

C. DRYLAND (NON-IRRIGATED) WINTER WHEAT

Arkansas, Georgia, Kentucky, Louisiana, Mississippi and Tennessee

Weeds Controlled:

<u>Broadleaves</u>	<u>Grasses</u>
Bittercress (<u>Cardamine spp.</u>)	Bluegrass, Annual (<u>Poa annua</u>)
*Buttercup (<u>Ranunculus spp.</u>)	*Cheatgrass (<u>Bromus secalinus</u>)
Carolina Geranium (<u>Geranium carolinianum</u>)	*Downy Brome (<u>Bromus tectorum</u>)
Chickweed, Common (<u>Stellaria media</u>)	Little Barley (<u>Hordeum pusillum</u>)
Chickweed, Mousear (<u>Cerastium vulgatum</u>)	*Rescuegrass (<u>Bromus catharticus</u>)
Cutleaf Evening Primrose (<u>Oenothera laciniata</u>)	*Ryegrass, Italian (<u>Lolium multiflorum</u>)
Henbit (<u>Lamium amplexicaule</u>)	Whitlowgrass, Vernal (<u>Draba verna</u>)
*Kochia (<u>Kochia scoparia</u>)	
Lambsquarters, Common (<u>Chenopodium album</u>)	
Mayweed (dog fennel) (<u>Eupatorium capillifolium</u>)	
Mustard, Wild (<u>Brassica kaber</u>)	
Pepperweed, Virginia (<u>Lepidium virginicum</u>)	
Pigweeds (<u>Amaranthus spp.</u>)	
Shepherdspurse (<u>Capsella bursa-pastoris</u>)	
Wild Turnip (<u>Brassica rapa</u>)	
Wild Radish (<u>Raphanus raphanistrum</u>)	

*For control of these weeds on fine soils, use SENCOR SOLUPAK at 2/3 pound/acre.

Note: Control of wild buckwheat (Polygonum convolvulus) and winter vetch (Vicia spp.) may be variable with SENCOR SOLUPAK, ranging from poor to excellent depending on stage of growth at time of application, temperatures and moisture conditions following application.

Recommended for use only on the following wheat varieties:

Abe, Arthur 71, Caldwell, Coker 747, Coker 762, Coker 797, Coker 68-15, Doublecrop, Florida 302, Hunter, McNair 1003, McNair 1813, Magnum, Nelson, Oasis, Omega 78, Pike, Pioneer 2550, Pioneer 2555, Saluda, Southern Belle, Stacy, Traveler, Twain, and Tyler.

RECOMMENDED BROADCAST APPLICATIONS

Soil Texture	SENCOR SOLUPAK ⁽¹⁾ Pounds/Acre	Remarks
Coarse (Sandy loam, loamy sand)	1/3	Apply specified dosage per acre as a broadcast postemergence spray. For wheat coming out of Winter dormancy, allow at least two weeks for plants to recover before application. If wheat has been grazed during the Winter, allow at least two weeks for recovery before application. Do not apply before 75 days after planting. Apply only after wheat has 4 tillers, but before jointing. <u>Georgia Only:</u> Wheat must be planted before November 15 in the Piedmont area and northern part of the state, and before December 1 in the Coastal Plain area.
Medium (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/2	
Fine (Silty clay, silty clay loam ⁽²⁾ , clay, clay loam)	1/2 to 2/3 ⁽³⁾	

- (1) Do not use on coarse soils containing less than 1% organic matter or on Medium or Fine textured soils containing less than 0.5% organic matter.
- (2) Silty clay loam soils are transitional soils and may be classified as Medium textured soils in some regions of the U.S.
- (3) Use 2/3 pound/acre for control of weed species designated with an asterisk under "Weeds Controlled".

SENCOR in Combination with other Herbicides:

SENCOR SOLUPAK may be applied as directed above or may be tank mixed with those herbicides listed under "Application."