

BASF

GalaxyTM

herbicide

ACCEPTED
MAY 21 1992
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 7969-77

Postemergence Herbicide

For broad spectrum weed control in soybeans.

A soluble liquid formulation containing:

Active ingredients*

Sodium salt of bentazon: sodium (3-isopropyl-1H-2,1,3-benzothiadiazin-4 (3H)-one-2,2-dioxide	33.4%
Sodium salt of acifluorfen: sodium 5-[2-chloro-4-(trifluoromethyl) phenoxy]-2-nitrobenzoate	6.8%
Inert ingredients	59.8%
Total	100.0%

*Equivalent to 3.00 pounds per gallon bentazon: 3-(isopropyl)-1H-2,1,3-benzothiadiazin-4 (3H)-one 2,2-dioxide and 0.67 pounds per gallon of sodium acifluorfen: sodium 5-[2-chloro-4-(trifluoromethyl) phenoxy]-2-nitrobenzoate.

EPA Reg. No. 7969-77

KEEP OUT OF REACH OF CHILDREN.

DANGER/PELIGRO

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta haya sido explicada ampliamente.

Net contents 2½ gallons

BASF Corporation
P.O. Box 13528, Research Triangle Park, NC 27709

Specimen Label

Hazards to Humans

DANGER

Causes eye damage. Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes. Wear goggles or face shield when handling. Avoid breathing vapor or spray mist and contact with skin or clothing. In case of contact, immediately remove contaminated clothing and shoes. Wash contaminated clothing with soap and hot water before re-use. May cause allergic skin response.

Statement of practical treatment

If in eyes: Flush with large amounts of water for at least 15 minutes. Get medical attention.

If on skin: Wash with plenty of soap and water. Consult a physician if irritation persists.

If swallowed: Dilute by giving 2 glasses of water to drink and call a physician. Never give anything by mouth to an unconscious person.

Note to physician: Emesis is recommended.

Environmental hazards

Do not apply directly to lakes, ponds or streams. Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift from target area.

Re-entry and workers' protection statements

Do not apply this product in such a manner as to directly or through drift, expose workers or other persons. The area being treated must be vacated by unprotected persons. Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Directions for use

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

Storage and disposal

Keep from freezing. Store above 40°F.

Do not contaminate water, food or feed by storage or disposal.

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

Triple rinse container (or equivalent). Puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Do not re-use empty container.

In case of emergency

In case of large-scale spillage regarding this product, call:

CHEMTREC 800-424-9300
BASF Corporation 800-832-HELP

In case of medical emergency regarding this product, call:

1. Your local doctor for immediate treatment.
2. Your local poison control center (hospital).
3. BASF Corporation 800-832-HELP.

Steps to be taken in case material is released or spilled.

Dike and contain spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing and wash affected skin areas with water. Wash clothing before re-use. Keep spill out of all sewers and open bodies of water.

General information

Galaxy™ herbicide is intended for selective postemergence control of certain broadleaf weeds. **Galaxy** is effective mainly through contact action; therefore, weeds must be thoroughly covered with spray.

Galaxy may cause some soybean leaf-speckling and leaf-bronzing to occur under certain conditions. (See **Restrictions and limitations.**)

Timing of applications

Make postemergence applications of **Galaxy** early, when weeds are small and actively growing and before weeds reach the maximum size listed in the **Application Rate Table**. Delay in application which permits weeds to exceed the maximum size stated will result in inadequate control.

Cultivation before or during the application is not recommended. Cultivation may put weeds under stress, thus making control more difficult to obtain. Timely cultivation 5-7 days after application will usually assist in weed control.

Water volume and spray pressure

Apply recommended rates of **Galaxy** as follows:

Ground equipment: Use a minimum of 20 gallons of water per broadcast acre and a minimum of 40 psi pressure (measured at the boom, not at the pump or in the line). When crop and weed foliage is dense, use up to 50 gallons of water and up to 80 psi pressure. Use standard high pressure pesticide hollow cone or flat fan nozzles spaced 20 inches apart. Do not use flood, whirl chamber, or controlled droplet applicator (CDA) nozzles.

Air equipment: Use 5-10 gallons of water per acre and a maximum of 40 psi pressure. Use only diaphragm-type nozzles producing cone or fan spray patterns.

Aerial application—special directions and restrictions

To obtain uniform coverage and to avoid drift hazards, the following application equipment and practices should be used:

Nozzle height: 6 to 10 feet above crop.

Nozzle orientation: Nozzles must be oriented so as to discharge straight back with the air stream (opposite the direction of travel of the aircraft) and not more than 20 degrees downward.

Nozzles must not be located farther out than three-fourths the distance from the center of the aircraft to the end of the wing or rotor.

Do not apply **Galaxy** by aircraft when wind is blowing at a velocity above 10 mph. Coarse sprays (larger droplets) are less likely to drift.

Do not apply **Galaxy** by spray on ornamentals or sensitive non-target crops, such as cotton, sugar beets, sunflowers or okra are within 200 feet downwind

Applicator must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling as well as applicable state and local regulations and ordinances.

Spray additives

Additives are needed with **Galaxy** to achieve consistent weed control. Either crop oil concentrate, urea ammonium nitrate (UAN), or ammonium sulfate are recommended. Directions for use of each follow.

Oil concentrate

A nonphytotoxic crop oil concentrate (commonly referred to as oil concentrate) can be added to the spray tank with **Galaxy**.

The oil concentrate must contain either a petroleum or vegetable oil base and must meet the following criteria: 1) be nonphytotoxic, 2) contain only EPA-exempt ingredients, 3) provide good mixing quality in the jar test, and 4) prove beneficial in local experience.

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers which provide good mixing quality. For vegetable oil concentrates, it has been observed that highly refined vegetable oils are more satisfactory than unrefined vegetable oils. For additional information see **Jar test for estimating suitability of oil concentrates** at the end of this section.

With the addition of oil concentrate to **Galaxy** on soybeans, some leaf burn may occur, but generally all new growth is normal and crop vigor is not reduced. The potential for leaf burn is increased when relative humidity and temperature are high. A few oil concentrates have exhibited excessive leaf burn. Refer to your supplier for information concerning successful local experience prior to purchasing any oil concentrate.

Rate of oil concentrate:

Ground application- 2 pints/acre (maximum).

Air application- 1 pint/acre (maximum).

Jar test for estimating suitability of oil concentrates

1. **Water supply:** Use only water from intended source and at the source temperature.
2. **Amount of water in jar:**
Ground application—For 20 gals./A spray volume use 3 $\frac{1}{3}$ cups (800 ml) of water.
Air application—For 10 gals./A spray volume use 1 $\frac{2}{3}$ cups (400 ml) of water.
For other spray volumes, adjust proportionately to above.
3. **Amount of Galaxy and oil concentrate to add:** Add **Galaxy** and oil concentrate at the rate of 1 teaspoon (5 ml) for each pint of recommended label rate.
4. **Add components in following sequence**, gently mixing between component additions:
 - a. **Galaxy**
 - b. Oil concentrate
5. **Cap jar, invert 10 cycles, let stand for 15 minutes, evaluate.**
6. **Evaluation:** An ideal tank mix combination will be uniform; thus, the suitability of the oil concentrate is questionable if any of the following are observed:
 - Free oil (film or globules) at the surface.
 - Flocculation—fine particles which may be suspended in the liquid or found as a precipitated layer at the bottom of the jar.
 - Clabbering—thickening texture (coagulated) resembling yogurt or a curd-like texture as with cottage cheese.

Urea ammonium nitrate (UAN) or ammonium sulfate

For improved velvetleaf control in soybeans, a UAN solution (commonly referred to as 28%, 30% or 32% nitrogen solution) or ammonium sulfate may be added in place of crop oil concentrate. UAN and ammonium sulfate are agricultural grade fertilizers used by dealers for agricultural applications.

With the addition of UAN or ammonium sulfate, a leaf burn on soybeans may occur, but the new growth is normal and crop vigor is not reduced. Refer to your supplier of **Galaxy** for information concerning successful local experience prior to using UAN or ammonium sulfate. Do not use brass or aluminum nozzles when spraying with UAN or ammonium sulfate.

Use rate for UAN or ammonium sulfate

Ground application: UAN— $\frac{1}{2}$ to 1 gallon per acre. Ammonium sulfate—2.5 lbs. per acre.

Air application: UAN— $\frac{1}{2}$ gallon per acre. Ammonium sulfate—BASF does not recommend the application of ammonium sulfate if applied in less than 10 gallons per acre due to potential problems with precipitation in reduced volumes. Ammonium sulfate can be applied by air at 2.5 lbs. per acre if the application is made in more than 10 gallons per acre of total solution. Use ammonium sulfate only if it has been demonstrated to be successful in local experience.

Mixing/spraying

Fill tank of a thoroughly clean sprayer half to two-thirds full with clean water. Start agitation and add **Galaxy**; allow to mix thoroughly. Add spray additive and remaining volume of water. Maintain constant agitation during application.

Oil Concentrate plus Nitrogen Solution

A nonphytotoxic oil concentrate (as referred to above) plus a nitrogen solution (UAN or AMS) can be added to the spray tank with **Galaxy**. This combination is recommended for use in areas of low humidity and moderate temperatures when lambrquarters, ragweed and velvetleaf are to be controlled. Excessive crop injury can occur with this combination in high humidity and high temperature regions. Do not exceed recommended rates and adjust additive rate proportionately to gallonage applied.

Ground application: Oil concentrate* 0.25% volume/volume (2 pts per 100 gallons spray solution)

plus

Nitrogen solution:

UAN: 2.5% volume/volume (1-1/2 gallons per 100 gallons spray solution)

AMS: 6-1/4 lbs./100 gal spray solution (1.25 lbs/A @ 20 gal/A)

* A nonionic surfactant can be substituted for oil concentrate.

Application Rate Table

Applications of **Galaxy** herbicide should be made when weeds are small and actively growing and before weeds reach the maximum size listed below. Such applications generally correspond to the soybean growth stages of unifoliate to two expanded trifoliate leaves. Soybeans may experience slight yellowing, bronzing, speckling, or burning of leaves under certain conditions. Soybean plants generally outgrow this condition within 10 days.

Weeds Controlled	Application Rates for Weed Growth Stages			
	Leaf Stage Up to	Max. Height	Rate of Galaxy per Acre	Spray Additives Rate/A
Anoda, Spurred	6	3"	2 pints	See page 3 for details 1-2 pints oil concentrate or if velvetleaf is the primary weed target and lambsquarters or common ragweed are not a problem, use either 1/2 to 1 gallon UAN or 2.5 lbs. ammonium sulfate in place of oil concentrate. 0.25% VV oil concentrate plus 2.5% VV UAN
Beggarticks	6	6"		
Buckwheat, Wild	4	3"		
Cocklebur*	6	6"		
Dayflower	6	4"		
Devilsclaw*	6	3"		
Galinsoga*	6	2"		
Jimsonweed	6	6"		
Ladysthumb	6	6"		
Lambsquarters, Common*	6	2"		
Mallow, Venice	6	4"		
Morningglories	4	2"		
Mustard, Wild	6	4"		
Nightshade, Black	2	<2"		
Nutsedge, Yellow*	—	6-8"		
Pigweed, Redroot	4	2"		
Pigweed, Smooth	4	2"		
Poinsettia, Wild	4	4"		
Purslane, Common	4	1"		
Ragweed, Common	6	3"		
Ragweed, Giant	4	6"		
Redweed	6	6"		
Shepherdspurse*	6	4"		
Sida, Prickly or Teaweed	6	3"		
Smartweed, Pennsylvania	6	6"		
Starbur, Bristly	4	2"		
Sunflower, Wild	4	5"		
Thistle, Canada*	—	8" to bud stage		
Velvetleaf	6	5"		
Waterhemp, Tall	4	2"		

*Do not treat earlier than leaf stage shown and do not count cotyledon leaves.
 †Control may be inconsistent with this rate of **Galaxy**. A later application of **Basagran** herbicide may be necessary (see label for **Basagran**).
 ‡Control may be partial or inconsistent with this rate of **Galaxy**. A later application of **Biazer** herbicide may be necessary (see label for **Biazer**).
 §Do not treat rosette before seed stalk appears.

†† AAS may be used in place of UAN. A suitable surfactant containing at least 80% active ingredient may be used in place of oil concentrate.
 (See section entitled Spray Additives)

Restrictions and Limitations
 Do not apply more than a total of 3 pints of **Galaxy** per acre per season. Do not apply more than 1 3/4 pints of **Basagran** or 1.0 pint of **Biazer** following an application of 3 pints of **Galaxy** per acre per season.

Do not apply **Galaxy** to soybeans that have been subject to stress conditions such as hail damage, flooding, drought, injury from other herbicides, or widely fluctuating temperatures, as crop injury may result.

Do not apply **Galaxy** to soybeans that show injury (leaf phytotoxicity and/or plant stunting) produced by any other prior herbicide applications, because this injury may be enhanced and/or prolonged.

Do not apply **Galaxy** during prolonged periods of drought or during unseasonably cold weather, as unsatisfactory weed control may result. Rainfall or overhead irrigation soon after application may decrease the effectiveness of **Galaxy**.

Physical incompatibility, reduced weed control, or crop injury may result from mixing **Galaxy** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. BASF does not recommend the use of **Galaxy** tank mixes other than those listed on BASF labels, supplemental labels, or technical information bulletins. Local agricultural authorities may be a source of information when using other than BASF approved tank mixes.

Do not apply **Galaxy** within 50 days of soybean harvest.

Root crops (such as carrots, turnips, sweet potatoes, etc.) must not be planted in fields treated with **Galaxy** for a period of 18 months following treatment.

In case of crop failure, only peanuts or soybeans may be immediately replanted.

Do not use treated plants for feed or forage.

Do not apply **Galaxy** through any type of irrigation equipment.

Appendix

The following are scientific names for the weeds listed in this section. For specific recommendations on control of these weeds, refer to the **Application Rate Table**.

Broadleaf weeds

Common Name	Scientific Name
Anoda, Spurred	<i>Anoda cristata</i>
Beggarticks	<i>Bidens frondosa</i>
Buckwheat, Wild	<i>Polygonum convolvulus</i>
Butt-on-weed (see Velvetleaf)	—
Butterprint (see Velvetleaf)	—
Cocklebur	<i>Xanthium strumarium</i>
Dayflower	<i>Commelina</i> spp.
Devilsclaw	<i>Provincideia louisianica</i>
Galinsoga	<i>Galinsoga</i> spp.
Jimsonweed	<i>Datura stramonium</i>
Ladysthumb	<i>Polygonum persicaria</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Mallow, Venice	<i>Hibiscus trionum</i>
Morningglory, Common (tall)	<i>Ipomoea purpurea</i>
Cypressvine	<i>Ipomoea quamoclit</i>
Entireleaf	<i>Ipomoea hederacea</i>
Ivyleaf	<i>Ipomoea hederacea</i>
Palmleaf	<i>Ipomoea wrightii</i>
Pitted	<i>Ipomoea lacunosa</i>
Purple Moonflower	<i>Ipomoea muricata</i>
Smallflower	<i>Jacquemontia tamnifolia</i>
Mustard, Wild	<i>Sinapsis arvensis</i>
Nightshade, Black	<i>Solanum nigrum</i>
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Smooth	<i>Amaranthus hybridus</i>
Poinsettia, Wild	<i>Euphorbia heterophylla</i>
Purslane, Common	<i>Portulaca oleracea</i>
Ragweed, Common	<i>Ambrosia artemisiifolia</i>
Giant	<i>Ambrosia trifida</i>
Redweed	<i>Melochia corchorifolia</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Sida Prickly or Teaweed	<i>Sida spinosa</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Starbur, Bristly	<i>Acanthospermum hispidum</i>
Sunflower, Wild	<i>Helianthus annuus</i>
Thistle, Canada	<i>Cirsium arvense</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Waterhemp, Tall	<i>Amaranthus tuberculatus</i>

Sedges

Common Name	Scientific Name
Nutsedge, Yellow	<i>Cyperus esculentus</i>

Conditions of sale and warranty

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

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