

PM23 62719-184

10/12

US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (TS-767) WASHINGTON, DC 20460	EPA REGISTRATION NO. 62719-184	DATE OF ISSUANCE 8 FEB 1993
	TERM OF ISSUANCE Conditional	
	NAME OF PESTICIDE PRODUCT Sonalan 10G	

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION
(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

DowElanco
9002 Purdue Road
Indianapolis, IN 46268-1189

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit/Cite all data or other material required for registration/reregistration of your product under FIFRA section 3(c)(5) or FIFRA section 4 when the Agency requires all registrants of similar products to submit such data.
2. Add the phrase, "EPA Registration No. 62719-184" to your label before you release the product for shipment.
3. Under Dry Peas, remove the hyphen after 7.5 for medium soil texture.
4. An acute inhalation toxicity study must be submitted to EPA within 9 months of the date on this registration notice.

Submit three (3) copies of your final printed labeling, with the change referred to above, before you release the product for shipment. Refer to the A-79 previously mailed to you for a further description of final printed labeling.

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE

2042

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Joanne I. Miller
 Product Manager (23)
 Fungicide-Herbicide Branch
 Registration Division (H7505C)

Enclosure

CONCURRENCES

SYMBOL	H7505C						
SURNAME	Robbins						
DATE	2/4/93						

3012

(Base Label)

(LOGO) DowElanco

Sonalan* 10G

Herbicide

A selective herbicide for preemergence control of certain annual grasses and broadleaf weeds.

Active Ingredient:

✓ ethalfuralin: N-ethyl-N-(2-methyl-2-propenyl)-2,6-dinitro-4-(trifluoromethyl)benzenamine..... 10% ✓

Inert Ingredients..... 90% ✓

Total 100% ✓

✓ Contains 5 pounds of active ingredient per 50 pound bag.

Precautionary Statements

Hazards to Humans and Domestic Animals

Keep Out or Reach of Children

DANGER

PELIGRO:

Precaucion al usuario: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

Corrosive • Causes Irreversible Eye Damage • Do Not Get In Eyes

Wear goggles, face shield or safety glasses. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing dust and contact with skin, eyes or clothing. Use protective clothing such as coveralls, a long-sleeved shirt and impermeable gloves when handling this product. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

First Aid

If in eyes: Hold eyelids open and flush with a gentle stream of water for 15 minutes. Call a physician, preferably an ophthalmologist) or Poison Control Center immediately.

If swallowed: Do not induce vomiting. Call a physician or Poison Control Center. If available, administer activated charcoal (6-8 heaping teaspoonfuls) with a large quantity of water. Do not give anything by mouth to an unconscious person. Immediately transport to a medical care facility and see a physician.

If inhaled: Remove individual to fresh air. Get medical attention if breathing difficulty occurs. If not breathing, give artificial respiration, preferably cardiopulmonary resuscitation, and get medical attention immediately.

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

Environmental Hazards

This pesticide is toxic to fish. Do not apply directly to any body of water or wetlands. Do not contaminate water when disposing equipment washwaters. Runoff or erosion from treated areas may be hazardous to fish in neighboring areas.

ACCEPTED
with COMMENTS
to EPA Letter Dated:

8 FEB 1993

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
62719-184

Directions for Use

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

- ✓ **STORAGE AND DISPOSAL**
Do not contaminate water, food or feed by storage or disposal.
- ✓ **Storage:** Store in original container only. In case of spill, contain material and dispose as waste.
- ✓ **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
- ✓ **Container Disposal:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, in accordance with applicable regulations, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Refer to attached label booklet for additional precautionary information including Directions for Use.

Notice: Read the entire label before using. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.

In case of emergency endangering health or the environment involving this product, call collect 517-636-4400

Agricultural chemical - Keep away from food, feedstuffs and water supplies. Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-184

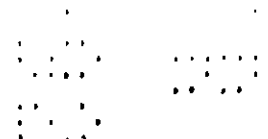
EPA Est. 00000-XX-00

*Trademark of DowElanco

DowElanco • Indianapolis, Indiana 46268, U.S.A.

Herbicide

Net Weight - xx pounds ✓



50412

(Label Booklet)

(I.CGO) DowElanco

Sonaian* 10 G

Herbicide

A selective herbicide for preemergence control of certain annual grasses and broadleaf weeds.

Active Ingredient:

ethalfurain: N-ethyl-N-(2-methyl-2-propenyl)-2,6-dinitro-4-(trifluoromethyl)benzenamine.....	10%	/
Inert Ingredients.....	90%	/
Total	100%	/

Contains 5 pounds of active ingredient per 50 pound bag. /

Keep Out of Reach of Children
DANGER /

Notice: Read the entire label before using. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.

In case of emergency endangering health or the environment involving this product, call collect 517-636-4400

Agricultural chemical - Keep away from food, feedstuffs and water supplies. Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-184

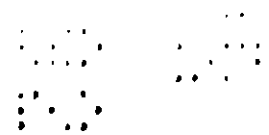
EPA Est. 00000-XX-00

*Trademark of DowElanco

DowElanco • Indianapolis, Indiana 46268, U.S.A.

Herbicide

Net Weight - xx pounds



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Precautionary Statements

Hazards to Humans and Domestic Animals**DANGER****PELIGRO:**

Precaucion al usuario: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

Corrosive • Causes Irreversible Eye Damage • Do Not Get In Eyes

Wear goggles, face shield or safety glasses. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing dust and contact with skin, eyes or clothing. Use protective clothing such as coveralls, a long-sleeved shirt and impermeable gloves when handling this product. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

First Aid

If In eyes: Hold eyelids open and flush with a gentle stream of water for 15 minutes. Call a physician, preferably an ophthalmologist) or Poison Control Center immediately.

If swallowed: Do not induce vomiting. Call a physician or Poison Control Center. If available, administer activated charcoal (6-8 heaping teaspoonfuls) with a large quantity of water. Do not give anything by mouth to an unconscious person. Immediately transport to a medical care facility and see a physician.

If Inhaled: Remove individual to fresh air. Get medical attention if breathing difficulty occurs. If not breathing, give artificial respiration, preferably cardiopulmonary resuscitation, and get medical attention immediately.

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

Environmental Hazards

This pesticide is toxic to fish. Do not apply directly to any body of water or wetlands. Do not contaminate water when disposing equipment washwaters. Runoff or erosion from treated areas may be hazardous to fish in neighboring areas.

Directions for Use

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

STORAGE AND DISPOSAL

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

Storage: Store in original container only. In case of spill, contain material and dispose as waste.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, in accordance with applicable regulations, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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General Information

Sonalan 10G is a selective herbicide for preemergence control of certain annual grasses and broadleaf weeds. Apply and incorporate Sonalan 10G before planting. Sonalan 10G does not control established weeds.

General Use precautions

Poor weed control and/or crop injury may result if directions are not followed. Uneven application or improper incorporation can result in erratic weed control or injury to the treated or rotational crops.

Do not graze or use treated crop for feed or forage including silage.

Do not apply Sonalan 10G to soils that are wet, cloddy, or subject to prolonged periods of flooding as poor weed control or crop injury may result.

Apply only in areas and to crops specified on this label.

Rotational Crop Restrictions

Replanting: If replanting is required, plant only those crops approved for treatment with Sonalan 10G or Sonalan E.C.

Sugar Beets or Red Beets: Do not plant sugar beets or red beets within 13 months following an application of 11 or more pounds per acre of Sonalan 10G. Where less than 11 pounds per acre of Sonalan 10G have been applied, sugar beets or red beets may be planted 8 months after an application of Sonalan 10G provided that the treated area is moldboard plowed to a depth of 12 inches prior to planting.

Spinach or Oats: In California and Arizona do not plant spinach or oats within 8 months following an application of 11 pounds or more of Sonalan 10G.

Application Directions

Soil Preparation: If necessary, use tillage to reduce ground cover (weeds or crop residue) to a level that will not interfere with the uniform application and soil incorporation of Sonalan 10G. The soil surface condition should allow Sonalan 10G to be thoroughly and uniformly mixed into the top 2 to 3 inches of soil. If this is not possible the soil should be tilled prior to application.

Application: Apply Sonalan 10G only with equipment capable of accurate calibration and uniform application of herbicide granules. Apply at recommended rate for soil texture. Follow calibration directions provided by the equipment manufacturer.

Soil Incorporation: Two incorporation passes are necessary for Sonalan 10G. The first should occur as soon as possible after application and should not be delayed more than 48 hours after application. For best weed control results the second incorporation should be delayed for 3 to 5 days after the first. Use incorporation equipment capable of thoroughly and uniformly mixing Sonalan 10G into the top 2 to 3 inches of the seedbed.

Cultivation After Planting: Sonalan 10G treated areas may be shallowly cultivated without loss of weed control activity. Avoid deep cultivation that could bring untreated soil to the soil surface resulting in loss of weed control.

Soil Texture Guide for Application Rates

The amount of Sonalan 10G required for optimum weed control will vary, depending on soil texture and organic matter content. A fine-textured soil will require a higher application rate than a coarse-textured soil. Sonalan 10G application rates are based on the "Soil Texture Groups" (coarse, medium or fine) which correspond to the field soil textures to be treated. Using the table

below, determine if the soil to be treated is coarse, medium or fine and use the application rate recommended for coarse, medium or fine soils.

Soil Texture Group	Soil Texture of the Soil to be Treated
Coarse soils (Light)	Sand, loamy sand, sandy loam
Medium soils	Loam, silty clay loam*, silt loam, silt, sandy clay loam*
Fine Soils (Heavy)	Clay, clay loam, silty clay loam*, Silty clay, sandy clay, sandy clay loam*

*Silty clay loam and sandy clay loam soils are transitional soils and may be classified as either medium or fine textured soils. If silty clay loam or sandy clay loam soils are predominantly sand or silt, they are usually classified as medium textured soils. If they are predominantly clay, they are usually classified as fine textured soils.

Application Rate Ranges: Where a rate range is shown, use the lower rate for coarser textured soils or soils with low organic matter content. Use the higher rate in the rate range for finer textured soils and on soils containing more than 5% organic matter. Where soil texture is variable within the same field, use the lower recommended Sonalan 10G rate.

Weeds Controlled by Preplant Incorporated Treatment with Sonalan 10G.

Grasses:

<u>Common Name</u>	<u>Scientific Name</u>
Annual bluegrass	<i>Poa annua</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Crabgrass	<i>Digitaria spp.</i>
(Large crabgrass)	
(Smooth crabgrass)	
Cupgrass, woolly	<i>Eriochloa villosa</i>
Foxtail	<i>Setaria spp.</i>
(Giant foxtail)	
(Green foxtail)	
(Foxtail millet)	
(Pigeongrass)	
(Yellow foxtail)	
Goosegrass	<i>Eleusine indica</i>
Johnsongrass (from seed)	<i>Sorghum halepense</i>
Junglerice	<i>Echinochloa colorum</i>
Oat, wild ¹	<i>Avena fatua</i>
Panicum, fall	<i>Panicum dichotomiflorum</i>
Panicum, Texas	<i>Panicum texanum</i>
(Buffalograss)	
(Coloradograss)	
Ryegrass, Italian -	<i>Lolium multiflorum</i>
(Annual ryegrass)	
Sand, Jr. Field	<i>Cenchrus incertus</i>
Shattercane	<i>Sorghum bicolor</i>
(Wild cane)	
Signalgrass, broadleaf	<i>Bracharia platyphylla</i>
(Brachiaria)	
Witchgrass	<i>Panicum capillare</i>

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Broadleaf Weeds:

<u>Common Name</u>	<u>Scientific Name</u>
Buckwheat, wild	<i>Polygonum convolvulus</i>
Carpetweed	<i>Mollugo verticillata</i>
Catchfly, conical	<i>Silene conica</i>
Chickweed, common	<i>Stellaria media</i>
Fiddleneck tarweed	<i>Amsinckia lycopsoides</i>
Groundcherry, annua ² (Lanceleaf groundcherry)	<i>Physalis lanceifolia</i>
Henbit	<i>Lamium amplexicaule</i>
Kochia	<i>Kochia scoparia</i>
Lambsquarters, common	<i>Chenopodium album</i>
Nightshade, annual ² (Black nightshade) (Eastern black nightshade) (Hairy nightshade)	<i>Solanum spp.</i>
Pigweed (Prostrate pigweed) (Redroot pigweed) (Smooth pigweed) (Tumble pigweed)	<i>Amaranthus spp.</i>
Purslane, common	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Rochpurslane, redmaids	<i>Calandrinia caulescens</i>
Thistle, Russain	<i>Salsola iberica</i>

¹Sonalan 10G will provide wild oat control, except for seeds germinating below the Sonalan 10G treated zone.

²See special use rates for control in dry bean.

Approved Crops

Dry Beans

Apply Sonalan 10G as a preplant incorporated treatment. Follow soil preparation, application and incorporation procedures recommended in the "General Information" section of this label.

Broadcast Application Rates Per Acre: General weed control, except groundcherry and nightshade.

Soil Texture	Sonalan 10G (pounds)
Coarse	5.5 - 7.5
Medium	7.5 - 9.5
Fine	9.5 - 11.5

Broadcast Application Rates Per Acre: General weed control, including groundcherry and nightshade.

Precaution: Do not use these Sonalan rates for garden bean, green bean, snap bean, or string bean.

Soil Texture	Sonalan 10G (pounds)
Coarse	11.5 - 13.0
Medium	13.0 - 15.0
Fine	15.0 - 17.0

Overlay Treatments Following Sonalan 10G Application

For broader spectrum weed control, Sonalan 10G preplant incorporated treatment may be followed by preemergence overlay treatments using products registered for use on dry beans. Consult the manufacturer's labels for additional weeds controlled, directions for use, cautions and limitations before use.

Postemergence Treatments Following Sonalan 10G Application

For broader spectrum weed control, Sonalan 10G preplant incorporated treatment may be followed by postemergence or layby treatments using products registered for use on dry beans. Consult the manufacturer's labels for additional weeds controlled, directions for use, cautions and limitations before use.

Dry Peas

(Do Not Use In California)

Apply Sonalan 10G as a preplant incorporated treatment. Follow soil preparation, application and incorporation procedures recommended in the "General Information" section of this label.

Broadcast Application Rates Per Acre: General weed control, except groundcherry and nightshade.

Soil Texture	Sonalan 10G (pounds)
Coarse	5.5 - 7.5
Medium	7.5 -

Precaution:

Do not exceed recommended rates for Sonalan 10G in dry peas or crop injury may occur. Not all varieties of peas have been tested for tolerance to Sonalan. Consult your seed contractor before applying Sonalan to determine the tolerance of a particular pea variety. Application of Sonalan to non-tolerant varieties may result in crop injury and reduced yield. Do not graze or forage crop grown in treated soil or cut for hay or silage.

Peanuts

Apply Sonalan 10G as a preplant incorporated treatment. Follow soil preparation, application and incorporation procedures recommended in the "General Information" section of this label.

Broadcast Application Rates Per Acre:

Soil Texture	Sonalan 10G (pounds)
Coarse	5.5 - 7.5
Medium	7.5 - 9.5
Fine	9.5 - 11.5

Precaution:

Do not graze or forage crop grown in treated soil or cut for hay or silage.

Soybeans

Apply Sonalan 10G as a preplant incorporated treatment. Follow soil preparation, application and incorporation procedures recommended in the "General Information" section of this label.

Broadcast Application Rates Per Acre: General weed control, except groundcherry and nightshade.

Soil Texture	Sonalan 10G (pounds)
Coarse	5.5 - 7.5
Medium	7.5 9.5
Fine	9.5 11.5

Broadcast Application Rates Per Acre: General weed control, including partial control of groundcherry and nightshade.

Sonalan should be applied as a preplant incorporated treatment for partial control of groundcherry and nightshade on medium and fine textured soils. Follow recommended soil preparation and application procedures for Sonalan.

Soil Texture	Sonalan 10G (pounds)
Coarse	
Medium	11.5
Fine	13.0

Precautions:

Soybeans should be planted no more than 2 inches deep after early season adverse weather conditions have passed, especially when using higher rate programs. Excessively deep planting or cool wet weather early in the growth cycle causes additional stress to soybean plants. These factors may result in a reduced stand, delayed maturity and reduced yield.

Overlay Treatments Following Sonalan 10G Application (Do Not Use in California)

For broader spectrum weed control, Sonalan 10G preplant incorporated treatment may be followed by preemergence overlay applications of Canopy, Dual, Gemini, Lasso, Lexone, Lorox, Lorox Plus, Preview, or Sencor. Consult these product labels for additional weeds controlled, directions for use, cautions and limitations before use.

Postemergence Treatments Following Sonalan 10G Application

For broader spectrum weed control, Sonalan 10G preplant incorporated treatment may be followed by postemergence or layby applications of Basagran, Blazer, Classic, Cobra, Pinnacle, Pursuit¹, Reflex, Storm or Tackle. Consult these product labels for additional weeds controlled, directions for use, cautions and limitations before use.

¹Use of Pursuit is limited to certain states. Use Pursuit as a postemergence treatment following Sonalan 10G only in states specified on the Pursuit label.

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Sunflowers

Apply Sonalan 10G as a preplant incorporated treatment. Follow soil preparation, application and incorporation procedures recommended in the "General Information" section of this label.

Broadcast Application Rates Per Acre: General weed control, except groundcherry and nightshade.

Soil Texture	Sonalan 10G (pounds)
Coarse	5.5 - 7.5
Medium	7.5 - 9.5
Fine	9.5 - 11.5

Overlay Treatments Following Sonalan 10G Application

For broader spectrum weed control, Sonalan 10G preplant incorporated treatment may be followed by preemergence overlay treatments using products registered for use on sunflowers. Consult the manufacturer's labels for additional weeds controlled, directions for use, cautions and limitations before use.

WARRANTY DISCLAIMER

DowElanco warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. **DowElanco makes no other express or implied warranty of merchantability or fitness for a particular purpose or any other express or implied warranty.**

INHERENT RISKS OF USE

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to the label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of DowElanco or the seller. All such risks shall be assumed by the buyer.

LIMITATION OF REMEDIES

The exclusive remedy for losses or damages resulting from the use of this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to at DowElanco's election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

DowElanco shall not be liable for losses or damages resulting from handling or use of this product unless DowElanco is promptly notified of such loss or damage in writing. In no case shall DowElanco be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of DowElanco or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

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final formatting 1/6/92