SONALAN E.C. CHEMIGATION INSTRUCTIONS

Sonalan E.C. may be applied through properly equipped chemigation systems for weed control in certain crops. See supplemental use directions for specific crops for which chemigation with Sonalan is recommended. Read and follow all label instructions outlined below concerning chemigation before applying Sonalan E.C.

General Use Precautions

- Read the Sonalan E.C. label for directions, precautions and limitations prior to use.

 Do not apply Sonalan Dry Flowable through and system.

General Chemigation Directions

Apply this product only through continuously moving center pivot, lateral move or end tow sprinkler irrigation systems equipped for chemigation. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for chemigation application to a public water system.

A person knowledgeable of the chemigation system and responsible to? its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

- 1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point that pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment. Use of low trajectory angle sprinklers or drop nozzles will decrease the likelihood of drift.
 - Sonalan E.C. should be injected continuously throughout chelication water application period. The chemigation metering pump should be checked periodically during application to ensure proper operation.

- 9. The injection metering pump must be calibrated as specified by the manufacturer.
- 10. During chemigation, maintain agitation in supply tank at all times
- 11. Sonalan E.C. may cause some staining of plastic hoses and tanks.
- 12. Apply Sonalan E.C. in sprinkler irrigation equal to 1/2 to 1 inch of water.

Chemigation System Calibration

The following is a sample calculation for use of Sonalan E.C.

- Assume, in this example, 135 acres is to be covered by a chemigation treatment.
- Product required, assuming 2 pints per acre is 270 pints (33.75 gallons).
- Add 33.75 gallons of product directly to the injection supply tank.
- Adjust the injection system to deliver 33.75 gallons
 during the time required to apply 1 inch of water to 135
 acres.
- If the irrigation system requires 20 hours to apply 1 inch of water to 135 acres, the injection rate is 1.69 gallons per hour and is calculated as follows:

33.75 gallons ÷ 20 hours - 1.69 gallons per hour [1.69 gallons = 216 fluid ounces (fl. oz.)]

Proper calibration requires the injection pump to be adjusted to deliver 3.6 fl. oz. per minute and is calculated as follows:

216 fl. oz. per hr. ÷ 60 min. per hr. = 3.6 fl. oz. per min.

Mixing Directions

Undiluted:

When used alone, the injection of undiluted Sonalan E.C., is recommended in chemigation systems. For undiluted use, the impetering pump, supply tank, and any associated equipment must be

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SONALAN⁶⁹ E.C. (EPA REG NO. 1471-122)

SONALAN APPLIED THROUGH CHEMICATION SYSTEMS FOR WEED CONTROL IN DRY BEANS

Sonalan E.C. may be applied through properly equipped chemigation systems for general weed control (except groundcherry and nightshade) in dry beans. Refer to supplemental labeling entitled "Sonalan E.C. Chemigation Instructions" for use directions for chemigation. Do not apply Sonalan E.C. through any irrigation system unless supplemental labeling on chemigation is followed.

Apply Sonalan E.C. in sprinkler irrigation equal to 1/2 to 1 inch of water. Planting and application should occur as soon as possible after the last tillage operation. Sonalan must be applied A CCEPTED

NOV 24 1987 within 2 days after planting prior to crop or weed emergence. Sonalan does not control established weeds. Soil incorporation is not required when Sonalan is applied through chemigation systems.

Broadcast Rates per Acre

Soil Texture	Sonalan E.C. (pints)
Coarse Medium	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Fine	$\frac{2}{2} \frac{1}{2} - \frac{1}{3}$

Cultivation:

Soil treated with Sonalan may be shallow-cultivated without reducing weed control activity.

Precautions:

Read the Sonalan label for weeds controlled, additional ditection

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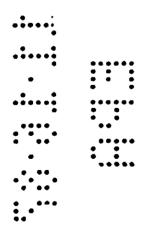
Sonalan E.C. may be diluted if required to achieve accurate calibration for existing equipment. Partially fill the injection supply tank with a volume of water equal to the amount of Sonalan E.C. required. Do not add water to Sonalan E.C. Start agitation. Add the required amount of Sonalan E.C. to the supply tank and continue mixing while filling the tank to the final volume required by the injection pump calibration. When injecting diluted Sonalan E.C., maintain continuous agitation in supply tank.

Precautions:

Read the Sonalan label for weeds controlled, additional directions, precautions and limitations prior to use.

Sonalan@E.C., Dry Flowable (ethalfluralin, Elanco)

Elanco Products Company
A Division of Eli Lilly and Company
-- Indianapolis, Indiana 46285



SONALAN E.C. (EPA REG. NO. 1471-122)

SONALAN APPLIED THROUGH CHEMIGATION SYSTEMS FOR WEED CONTROL IN SOYBEANS

Sonalan E.C. may be applied through properly equipped chemigation systems for general weed control (except groundcherry and nightshade) in soybeans. Refer to supplemental labeling entitled "Sonalan E.C. Chemigation Instructions" for use directions for chemigation. Do not apply Sonalan E.C. through any irrigation system unless supplemental labeling on chemigation is followed.

Apply Sonalan E.C. in sprinkler irrigation equal to 1/2 to 1 inch of water. Planting and application should occur as soon as possible ACCEPTION 1987 after the last tillage operation. Sonalan must be applied within 2 days after planting prior to crop or weed emergence. Sonalan does not control established weeds. Soil incorporation is not required when Sonalan is applied through chemigation systems.

Broadcast Rates per Acre

Soil Texture	Sonalan E.C. (pints)
Coarse	1 1/2 - 2
Medium	2 - 2 1/2
Fine	2 1/2 - 3

Cultivation:

Soil treated with Sonalan may be shallow-cultivated without reducing weed control activity.

Precautions:

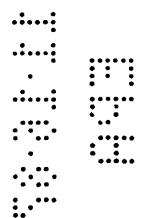
Read the Sonalan label for weeds controlled, additional diroction precautions and limitations prior to use.

Sonalan E.C. (ethalfluralin, Elanco)

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SONALAN E.C. (EPA REG. NO. 1471-122)

SONALAN APPLIED THROUGH CHEMICATION SYSTEMS FOR WEED CONTROL IN PEARUTS

Sonalan E.C. may be applied through properly equipped chemigation systems for weed control in peanuts. Refer to supplemental labeling entitled "Sonalan E.C. Chemigation Instructions" for use directions for chemigation. Do not apply Sonalan E.C. through any irrigation system unless supplemental labeling on chemigation is followed.

Apply Sonalan E.C. in sprinkler irrigation equal to 1/2 to 1 inch of water. Planting and application should occur as soon as possible after the last tillage operation. Sonalan must be applied within 2 days after planting prior to crop or weed emergence. Sonalan does not control established weeds. Soil incorporation is not required when Sonalan is applied through chemigation systems.

Broadcast Rates per Acre

Soil Texture	Sonalan E.C. (pints)
Coarse Medium Fine	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

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Cultivation:

Soil treated with Sonalan may be shallow-cultivated without reducing weed control activity.

Precautions:

Read the Sonalan label for weeds controlled, additional precautions and limitations prior to use.

Sonalan E.C. (ethalfluralin, Elanco)

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