

**TERRACLOR SUPER X® plus
Di-SYSTON® 39.3% EC
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Introduction

Terraclor Super X plus Di-Syston EC is a unique emulsifiable liquid formulation containing the broad spectrum in-furrow fungicide, Terraclor Super X, along with the early season insect control and Command® herbicide safener, Di-Syston. Prior to the development of Terraclor Super X plus Di-Syston EC, cotton farmers could obtain all these features only by tank mixing Terraclor Super X EC with Di-Syston 8 or through the use of the granular formulation, Terraclor Super X with Di-Syston. Because of the increasing use of liquid in-furrow products at planting time, Uniroyal Chemical Co., Inc. developed Terraclor Super X plus Di-Syston EC as a convenient, easy to handle, easy to use unit package formulation that provides all the desired benefits.

Composition

The active ingredients in Terraclor Super X plus Di-Syston EC are totally dissolved, making the formulation a true liquid. This eliminates any need to agitate prior to use. The ratio of the active ingredients is the same as that found in the Terraclor Super X with Di-Syston granular product. Each gallon of Terraclor Super X plus Di-Syston EC contains Terraclor 17.5% (1.5 lbs.), Di-Syston 17.5% (1.5 lbs. a.i.) and Terrazole 4.3% (0.4 lbs. a.i.).

The formulation has exceptional physical and chemical characteristics. It emulsifies readily and remains emulsified in a wide variety of water types. Long term storage trials of the formulation have demonstrated excellent stability for at least two years in either cold or hot weather conditions.

Efficacy

Terraclor Super X plus Di-Syston EC is registered for use at rates of 4 to 5.5 pints per acre (based upon 40 inch row spacing). At these rates, the amounts of active ingredient applied are equal to those supplied by the Terraclor Super X with Di-Syston granular product. Terraclor Super X with

Di-Syston Granular has been used by cotton farmers for more than 30 years and is still delivering excellent disease and early season insect control under today's demanding conditions. In more recent years, it has also been demonstrated that the Di-Syston component of the granular product can also be used to safen Command herbicide.

Cotton Seedling Disease Control

The Terraclor® and Terrazole® fungicide components of Terraclor Super X plus Di-Syston EC are well known for their ability to control the two most important cotton seedling diseases, *Rhizoctonia* and *Pythium*. The combination of these two fungicides also provides control of *Fusarium*.

University and Extension trials with Terraclor Super X plus Di-Syston EC throughout the mid-south and eastern Cotton Belt areas during the past three years have consistently demonstrated cotton seedling disease control that is equal to that provided by Terraclor Super X EC or Terraclor Super X granular products. Table 1 indicates that the unit package formulation of Terraclor Super X plus Di-Syston EC provides seedling disease control that is equal to that of tank mixes of Terraclor Super X EC and Di-Syston 8. See Table 1.

Early Season Insect Control

University and Extension trials have also demonstrated that Terraclor Super X plus Di-Syston EC provides comparable early season insect control to Di-Syston 8, when it is applied at comparable Di-Syston active ingredient rates. In order to obtain optimum early season control of thrips, Terraclor Super X plus Di-Syston EC should be applied at the maximum labeled rates of 5.5 pints per acre. Terraclor Super X plus Di-Syston EC is not recommended for control of western flower thrips.

COMMAND Herbicide Safening

The development of Command herbicide has presented cotton farmers with a highly effective addition to their weed control programs. Its use, however, requires that it be applied with an organophosphate insecticide, such as Di-Syston. When Terraclor Super X plus Di-Syston EC is applied within its labeled rate range from 4 to 5.5 pints per acre, it provides the recommended amount of Di-Syston to safen Command. University and Extension trials have demonstrated that Terraclor Super X plus Di-Syston EC is effective in safening Command when used at labelled rates.

Registration

Terraclor Super X plus Di-Syston EC was registered by the EPA in June, 1996. State registrations have been requested throughout all the midsouth and eastern Cotton Belt and approvals are expected prior to the startup of the 1997 cotton planting season. State recommendations based upon trials conducted between 1994 and 1996 are also expected to be available prior to the 1997 use season.

Terraclor Super X plus Di-Syston EC is a Restricted Use Pesticide and should be used only by certified applicators or persons under their direct supervision.

Commercial Availability

Terraclor Super plus Di-Syston EC will be packaged in 2.5 gallon, high density polyethylene fluorinated containers. Each carton will contain two 2.5 gallon containers. A 30 gallon high density polyethylene fluorinated drum will also be available for customers who can handle larger containers. Terraclor Super X plus Di-Syston EC will be readily available in all major cotton producing areas for the 1997 planting season.

Summary of Terraclor Super X Plus Di-Syston-Ec Benefits

Efficacy

- Controls soil-borne disease of *Rhizoctonia*, *Pythium* and *Fusarium*.
- Controls early season thrips and aphids.
- Safens Command herbicide when used at labelled rates.

Handling Convenience

- One container does it all. One container contains all three active ingredients.
- Eliminates mixing in the field. Reduces potential application mistakes.

Excellent Formulation Properties

- True solution. No need to agitate prior to mixing.
- Excellent emulsification properties in a wide variety of water types.
- Product is chemically and physically stable for at least two years.

Table 1. Final cotton plant stands (treated as a percent of untreated checks) resulting from in-furrow sprays at planting time with Terraclor Super X plus Di-Syston EC or tank mixes of Terraclor Super X EC and Di-Syston 8.

Location	Final Plant Stands (Treated as a % of Untreated Checks)		
	Terraclor Super X plus DiSyston EC		Tank Mix of Terraclor Super X- EC and DiSyston 8
	4 pts/A	5.5 pts/A	4 pts plus 1 pt/A
GA	113	113	103
MS	110	112	105
MS	107	108	103
AR	1883	3400	1717
TN	180	170	163

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