

Date: March 7, 1998

Products: Dual II MAGNUM™ (EPA Reg. No. 100-818)
 Dual MAGNUM™ (EPA Reg. No. 100-816)
 Dual II MAGNUM SI™ (EPA Reg. No. 100-829)
 Dual® 8E (EPA Reg. No. 100-597)
 Dual (EPA Reg. No. 100-673)
 Dual II® (EPA Reg. No. 100-711)

Use: Application of Dual Products in Liquid Fertilizer or Impregnation on Dry Fertilizer for use up to 60 days before Corn Planting

State: South Dakota

This recommendation is made as permitted under FIFRA Section 2(ee) and has not been submitted to or accepted by EPA.

For use and distribution in the state of South Dakota.

Refer to the federally approved labels for the following products: Dual II MAGNUM Early Preplant Application, EPA Reg. No. 100-818; Dual MAGNUM Early Preplant Application, EPA No. 100-816; Dual II MAGNUM SI Early Preplant Application, EPA Reg. No. 100-829, Dual® 8E Early Preplant Application, EPA Reg. No. 100-597, Dual Early Preplant Application, EPA Reg. No. 100-673; or Dual II Early Preplant Application, EPA Reg. No. 100-711; and read and follow all directions for use, restrictions, and precautionary statements.

This recommendation is made as permitted under FIFRA Section 2(ee). It is a violation of Federal law to use this product in a manner inconsistent with its label. This product bulletin must be in the possession of the user at the time of pesticide application.

Background Information

Early season weed control is critical for economical corn production with optimum yields. Dual controls most annual grasses and certain broadleaf weeds, and its use has annually increased as growers prefer its excellent corn selectivity and application flexibility with consistent season long performance. Dual is registered for early preplant application, in addition to the more normal preplant incorporated and preemergence application. Dual may be applied in liquid fertilizer or impregnated on dry fertilizers. The early preplant applications are favored since the herbicide may be applied prior to emergence of most weeds, negating the need for a contact herbicide for reduced tillage systems. These early applications also are advantageous for the herbicide. Early timing allows the spring rains to move the herbicide more fully through the previous crop residue, which is present in reduced tillage systems, to the soil surface where it is

available for absorption by germinating weed seedlings and thereby effective for optimum weed control. The long lasting effectiveness of Dual then provides weed control throughout the growing season.

Wet springs, as in 1993, do not allow many growers to make timely herbicide applications in the short favorable interval before the later than normal planting. The result is reduced corn yields from severe grass and broadleaf weed competition. This situation can be avoided or reduced if an early season herbicide application of Dual is applied. The current Dual label wording states: "make applications approximately 30 days before planting to allow moisture to move the herbicide/fertilizer mixture into the soil." While this statement does not prevent an application interval longer than 30 days, it does not set a maximum interval and can be confusing. Also, the maximum interval cannot be defined by the grower since the weather may not allow planting at a predetermined date. Specifying an earlier application date, for example up to 60 days prior to planting, allows for greater planning flexibility, applicator flexibility, and planting flexibility - as dictated by weather and soil conditions, resulting in optimum use of grower resources for weed control and maximum yields. Thus, this Section 2(ee) interpretation is provided to clarify that Dual can be applied in South Dakota as a preplant treatment up to 60 days before planting.

Directions for Use: Corn - Up to 60 Days Early Preplant - Entire state of South Dakota.

Apply Dual on dry or in liquid fertilizer up to 60 days prior to corn planting. Use on medium and fine textured soils in no-tillage or reduced spring tillage systems. If tilled after application and prior to corn planting, use a field cultivator set to provide uniform shallow (2 inches or less) incorporation.

Apply Dual II MAGNUM or Dual MAGNUM rate of 1.67 pints/A on medium soils and 2 pints/A on fine soils. Use 2.7 pints/A on soils with 6-20% organic matter.

or

Apply Dual II MAGNUM SI rate of 2 pints/A on medium soils and 2.5 pints/A on fine soils. Use 3.4 pints/A on soils with 6-20% organic matter. (This product is for impregnation only and cannot be mixed with water).

or

Apply Dual II, Dual 8E, or Dual rate of 2.5 pints./A on medium soils and 3.0 pints./A on fine soils. Use 4.0 pints/A on soils with 6-20% organic matter.

Refer to all labels for directions on impregnating dry or applying in liquid fertilizers. Application may be made to frozen soils where conditions exist for thawing later in the day.

Do not apply to coarse soils or soils with less than 2.5% organic matter.

Do not apply to "Highly Erodible Soils" (as defined by SCS).

Do not apply to ice or snow covered soils.

Dual®, Dual II®, Dual® 8E, Dual II MAGNUM™, Dual MAGNUM SI™, Dual MAGNUM™- trademarks of Novartis

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