

DuPont Crop Protection

# SUPPLEMENTAL LABELING

DUPONT™ MATRIX® FNV FOR RANGELAND RESTORATION WEST OF THE

MISSISSIPPI RIVER

# DUPONT<sup>TM</sup> MATRIX® FNV HERBICIDE

EPA REG. NO. 352-671

# FOR USE IN RANGELAND RESTORATION WEST OF THE MISSISSIPPI RIVER

#### DIRECTIONS FOR USE

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

 $DuPont^{TM}$  MATRIX® FNV must be used only in accordance with directions on this label or in separately published DuPont literature.

DuPont will not be responsible for losses or damages resulting from the use of this product in any manner not specifically directed on the label. User assumes all risks associated with such non-directed use.

#### GENERAL INFORMATION

MATRIX® FNV herbicide is a dispersible granule that is mixed in water and applied as a spray.

Continuous agitation is required to maintain the product in suspension in the spray tank. MATRIX® FNV is non-corrosive to spray equipment, non-flammable and non-volatile. Do not use MATRIX® FNV in a spray solution or with spray additives that buffer the pH to below 4.0, or above 8.0, as degradation of MATRIX® FNV may occur.

A restoration management program that includes MATRIX® FNV herbicide may be used when rangeland has become severely infested with invasive weed species, and deteriorated to where it is no longer suitable for grazing or forage production. To reclaim these lands, the invasive weed species must first be controlled to either allow native grasses to reestablish or to be replanted where practical with other desirable perennial grasses. The grasses must be allowed time to reestablish before grazing or forage production is resumed. A typical restoration management program will take one to two years.

In order to establish and/or release desirable, perennial grass species for rangeland restoration, MATRIX® FNV may be used to control the undesirable grasses and broadleaf weeds listed in the Weeds Controlled section of this label. The residual activity of MATRIX® FNV will also help prevent the reemergence of many of these weeds while desirable grasses are being reestablished.

At the maximum application rate of 4.0 ounces of MATRIX® FNV per acre per year desirable rangeland perennial grasses in the treated area may exhibit a temporary chlorosis following application. The use of an adjuvant with MATRIX® FNV can increase desirable perennial grass injury.

Do not graze treated sites or cut for forage or hay for a minimum of 1 year after application in order to allow newly emerged grasses sufficient time to become established. Where practical, fencing or other measures are to be used to prevent early grazing of re-established sites to help promote active grass restoration.

#### RESTORATION PROGRAM

An effective restoration program may include one or more of the following steps (A through F):

- A. Identifying and inventorying the weed infestation and desired grass densities.
- B. Consulting and planning the entire program with personnel experienced in herbicide programs and range restoration.
- C. Making applications of DuPont<sup>TM</sup> MATRIX® FNV prior to soil freeze up or after spring thaw. Make sure all label precautions are followed.
- D. Include a tank mix partner labeled for use on rangeland to broaden the spectrum of weeds controlled
- E. Planting grass seed as needed to improve the site, per the Grass Replant Interval section of the label.
  - Planting to obtain the highest possible grass stand establishment.
  - Planting a selected grass mixture to improve the desired stand
  - Using a properly fitted drill to help ensure correct seed placement and depth is suggested.
  - Seeding in late fall to best ensure moisture for seed germination. Seeding in the spring has the highest risk of stand failure.
  - Consulting with a knowledgeable grass seed supplier to select the best-suited varieties for your area.
- F. Treating for second year, forbes control (if necessary):
  - Treat with DuPont TELAR® XP (0.25 to 1 ounce per acre)
     + bromoxynil (1 pint per acre) to weeds at the early growth stage.

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## GRASS REPLANT INTERVAL

The replant interval is for soils with a pH of less than 7.5. Soils having a pH greater than 7.5 will require a longer interval. The replant interval is for applications made in the spring. Because MATRIX® FNV degradation is slowed by cold, dry, or frozen soils, applications made in the fall should consider the replant interval as beginning in the spring following treatment.

Following a treatment with MATRIX® FNV at use rates up to 4.0 ounces of product per acre, the following grasses may be replanted at least 7 months after a spring application. Rainfall or irrigation of at least 1/2 inch following treatment is necessary to replant 7 months after a MATRIX® FNV application. If the treated site does not receive at least 1/2 inch of rainfall or irrigation within four weeks after MATRIX® FNV application, then the grass replant interval is 12 months.

Crested wheatgrass Intermediate wheatgrass Blue bunch wheatgrass Squirreltail

Squirreltail Elymus elymoides
Beadless (creeping) wildrye
Big bluegrass Poa ampla
Idaho fescue Festuca idahoensi.
Smooth brome Bromus inermis

Agropyron cristatum Thinopyrum intermedium Pseudoroegneria spicata Elymus elymoides Leymus triticoides Poa ampla Festuca idahoensis Bromus inermis

Testing has indicated that there is considerable variation in response among species and types of grasses when seeded into areas treated with MATRIX® FNV. If species other than those listed above are to be planted into areas treated with MATRIX® FNV a field bioassay should be performed, or previous experience may be used to determine the feasibility of replanting treated areas. To conduct a field bioassay, grow to maturity test strips of the grass species you plan to grow the following year. The test strips should cross the entire field including knolls and low areas. Crop response to the bioassay will indicate whether or not to plant the grass species grown in the test strips.

# APPLICATION EQUIPMENT

MATRIX® FNV may be applied using ground or aerial spray equipment. Fixed wing aircraft and helicopters can be used to apply MATRIX® FNV, however, do not make applications by fixed wing aircraft unless appropriate buffer zones can be maintained to prevent spray drift out of the target area or, when treating open tracts of land, spray drift as a result of fixed wing aircraft application can be tolerated. Aerial equipment designed to minimize spray drift, such as a helicopter equipped with a Microfoil™ boom or raindrop nozzles, must be used and calibrated. Except when applying with a Microfoil™ boom, a drift control agent may be added at the labeled rate.

### APPLICATION RATES AND TIMING

Apply MATRIX® FNV at 2.0 to 4.0 ounces per acre in the fall or spring, prior to moisture expectation and plant growth. Do not apply when soil is frozen. For residual activity, moisture is required to activate MATRIX® FNV herbicide. When applied at lower rates in the spring, MATRIX® FNV provides suppression\* of weeds listed. When applied at higher rates in the fall, weed control is afforded.

\* Weed suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated check.

The degree of actual control that may occur will vary with the size of the weeds, the degree of weed or desirable grass competition, and environmental conditions.

#### TANK MIXTURES

MATRIX® FNVmay be tank mixed with other herbicides registered for use in rangeland. It may also be tank mixed with any adjuvants registered for rangeland use. Refer to the label of the tank mix partner(s) for any additional use intructions or restrictions.

MATRIX® FNV may be tank mixed with DuPont™ TELAR® XP herbicide (0.25 to 1.0 ounces per acre) to broaden the spectrum of broadleaf and grass weed control. Refer to the TELAR® XP label for additional information on weed species controlled, use rates, and instructions or restrictions.

#### WEEDS CONTROLLED

When applied at 2.0 ounces per acre in the spring, MATRIX® FNV suppresses the following weeds and when applied at 3.0 ounces per acre in the fall, MATRIX® FNV controls the following weeds:

Brome, downy (cheatgrass)*Bromus tectorum*Brome, Japanese *Bromus japonicus*Cheat *Bromus secalinus* 

When applied at 4.0 ounces per acre, MATRIX® FNV controls the following additional weeds:

Barnyardgrass Echinochloa crus-galli Crabgrass, large Digitaria sanguinalis Foxtail, giant Setaria faberi Foxtail, green Setaria viridis Foxtail, yellow Setaria glauca Filaree redstem Erodium cicutarium Fleabane, hairy Conyza bonariensis Malva neglecta Mallow, common Marestail/horseweed\* Conyza canadensis Medusahead Taeniatherum caput-medusae

Mustard, black Brassica nigra

Pigweed, redroot
Pigweed, smooth
Puncturevine

Pidwisted mgra

Amaranthus retroflexus

Amaranthus hybridus

Tribulus terrestris

\*Naturally occurring resistant biotypes of this weed are known to exist in some areas of the U.S. MATRIX® FNV will not control these biotypes.

## **USE PRECAUTIONS**

Treatment of powdery, dry soil or light, sandy soil when there is little likelihood of rainfall soon after treatment may result in off target movement and possible damage to susceptible crops when soil particles are moved by wind or water. Injury to crops may result if treated soil is washed, blown, or moved onto land used to produce crops. Exposure to MATRIX® FNV may injure or kill most crops. Injury may be more severe when the crops are irrigated. Do not apply MATRIX® FNV when these conditions are identified and powdery, dry soil or light or sandy soil are known to be prevalent in the area to be treated.

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In order to reduce the potential for off-site movement of MATRIX® FNV from wind or water related soil erosion do not burn, disk, or otherwise disturb treated sites between the time of application and reseeding or reestablishment of native grasses.

Preemergence use on soils containing more than 6% organic matter may result in reduced weed control.

Minimize spray drift to any adjacent crops, or planned crop planting areas, or desirable plants since injury may occur.

Draining or flushing equipment on or near desirable trees or other plants, or in areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots may injure these plants.

Crops (especially crops other than pome fruit, tree nuts, stone fruit, citrus, grapes, potatoes, tomatoes, and field corn) whose roots extend into a treated area may be injured.

Do not contaminate any body of water, including irrigation water that may be used on other crops.

Do not treat frozen soil.

Do not apply in or on irrigation ditches or canals including their outer banks.

Do not apply through any type of irrigation system.

If restoration sites treated with MATRIX® FNV are to be converted to an agricultural use other than rangeland, consult the MATRIX® FNV package label for all rotational crop instructions.

IMPORTANT NOTICE
BEFORE BUYING OR USING DUPONT PRODUCT(S)
COVERED BY THIS LABEL, READ THIS LABEL AND
THE LABELS FOR ALL PRODUCTS REFERENCED IN
THIS LABEL, IN THEIR ENTIRETY. FOLLOW ALL
APPLICABLE DIRECTIONS, RESTRICTIONS AND
PRECAUTIONS.

This label contains supplemental instructions for use of the referenced DuPont product. Follow these instructions carefully. This label must be in the possession of the user at the time of application.

Read the Limitation of Warranty and Liability on the Section 3 Federal product label before buying or using this product. If terms are not acceptable, return the unopened package at once to Seller for full refund of purchase price paid. Otherwise, use by Buyer or any other User constitutes acceptance of the terms of the Limitation of Warranty and Liability on the Section 3 Federal product label.

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