

# **SORGHUM**

## General Information

### GENERAL PRECAUTIONS AND RESTRICTIONS:

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. RIFLE-D is a selective postemergence herbicide for controlling a wide spectrum of annual, biennial and perennial broadleaf weeds and brush in grass forages and selected row crops.

### Mode of Action:

RIFLE-D contains two active ingredients: dicamba and 2,4-D. RIFLE-D is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth hormones (auxins) resulting in death of many broadleaf weeds.

### Susceptible Plants:

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

### Equipment:

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

### APPLICATION INSTRUCTIONS:

Apply RIFLE-D at the rates and growth stages listed in Tables 1 and 2 as follows unless instructed differently by Food/Feed Crop Specific Information or Non-Food/Feed Use-Specific Information. Applications can be made to actively growing

weeds as aerial, broadcast, band, or spot spray applications. RIFLE-D may be applied using water or sprayable fluid fertilizer as a carrier. Sprayable fluid fertilizer may be used as the carrier in preplant or pre-emergence uses for all crops listed on the label. Postemergence uses with sprayable fluid fertilizer may be made on pasture, hay land or wheat crops only. The most effective application rate and timing varies based on target weed species (refer to Table 1 of the label). In mixed populations of weeds the correct rate is determined by the weed species requiring the highest rate. Delaying application permits weeds to exceed the maximum size stated and will prevent adequate control.

#### Irrigation:

In irrigated areas, it may be necessary to irrigate before treatment to ensure active weed growth.

#### Spray Coverage:

Weeds must be thoroughly covered with spray. Dense leaf canopies shelter smaller weeds and can prevent adequate spray coverage.

#### Sensitive Crop Precautions:

RIFLE-D may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes and other broadleaf plants when contacting their roots, stems or foliage. These plants are most sensitive to RIFLE-D during their development or growing stage. Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of RIFLE-D with the roots of desirable plants such as trees and shrubs.

- Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if wind is gusty or in excess of 5 mph and moving in the directions of nearby sensitive crops or if a temperature inversion exists. However, always make applications when there is some air movement to determine the directions and distance of possible spray drift. Leave an adequate buffer zone between area to be treated and sensitive plants. Coarse sprays are less likely to drift out of the target area than fine sprays. Agriculturally-approved drift-reducing additives may be used.

- Do not use aerial equipment or apply RIFLE-D when sensitive crops and plants are growing in the vicinity of area to be treated.

#### Aerial Application Methods and Equipment

Water Volume: Use 3-10 gallons of water per acre. Use the higher spray volume when treating dense or tall vegetation.

Application Equipment: Select nozzles designed to produce minimal amounts of spray particles. Make applications at the lowest safe height to reduce the exposure of spray droplets to evaporation and wind. The applicator must follow the most restrictive use cautions to avoid drift hazards, including those found in the labeling as well as applicable state and local regulations and ordinances.

Do not use aerial equipment if spray particles can be carried by the wind into areas where sensitive crops or plants are growing or when temperature inversions exist

#### GROUND APPLICATION (Broadcast):

Water volume: Use 5-40 gallons of spray solution per broadcast acre for optimal performance. Use the higher spray volume when treating dense or tall vegetation.

Application Equipment: Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to weeds as is practical for good weed coverage.

#### SPOT OR SMALL AREA APPLICATION:

RIFLE-D may be applied to individual clumps or small areas of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems. For knapsack or other small capacity sprayers, prepare a solution of RIFLE-D in water according to TABLE 3 (assuming that the spot treatment rate equates to 60 gallons per acre on the broadcast basis). Adding a surfactant (0.5% by volume) can help improve control. For example, 5 gallons (40 pints or 640 fluid ounces) of herbicide solution would require 0.2 pints (3.2 fluid ounces) of surfactant.

Do not make spot treatments in addition to broadcast or band treatments.

Application Equipment: Select nozzles designed to produce minimal amounts of fine

spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

#### COMPATIBILITY TEST FOR MIX COMPONENTS:

Before mixing components, always perform a compatibility jar test. For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the Mixing Order using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre. Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, do not mix the ingredients in the same tank.

#### RESTRICTIONS AND LIMITATIONS:

##### Crop Rotational Restrictions:

The interval between application and planting rotational crop is given below. Always exclude counting days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

Planting/replanting restrictions for applications of RIFLE-D at 6 pints per acre or less: No rotational cropping restrictions apply at 120 days or more following application. Additionally, for annual crop uses in the label including sorghum, follow the preplant use directions in Food/Feed Crop-Specific Information. For barley, oat, wheat and other grass seedlings, the interval between application and planting is 10 days per pint per acre.

Planting/replanting restrictions for applications of more than 6 pints and up to 8

pints of RIFLE-D per acre: Corn, sorghum, cotton (east of the Rocky Mountains) and all other crops grown in areas with 30" or more of annual rainfall may be planted 120 days or more after application. Barley, oat, wheat and other grass seedlings, may be planted if the interval from application to planting is 10 days per pint per acre east of the Mississippi River and 15 days per pint per acre west of the Mississippi river. For all other crops in areas with less than 30" of annual rainfall, the interval between application and planting is 180 days or more.

Rainfast period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of RIFLE-D.

Stress: Do not apply to crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures as unsatisfactory control may result.

Do not apply to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications because this injury may be enhanced or prolonged.

Do not apply through any type of irrigation equipment. Do not contaminate irrigation ditches or water used for domestic purposes.

RIFLE-D cannot be used to formulate or reformulate any other pesticide product.

#### Limitations, Restrictions, and Exceptions

##### SORGHUM:

Apply 1 pint (.36 lb 2,4-D ae) of RIFLE-D per acre to sorghum in the 3-5 leaf stage (4-8" tall). For best performance, apply RIFLE-D when weeds are small (less than 3" tall).

Applications of RIFLE-D to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown within 10-14 days. Sorghum growing under conditions of stress such as high moisture, low fertility and abnormal temperature may be more sensitive to applications of RIFLE-D. Do not use surfactants or oils with postemergence applications of RIFLE-D on sorghum crops.

Do not use RIFLE-D if the potential for sorghum injury is not acceptable.

If sorghum is grown for pasture, hay, or silage, refer to Pasture and Rangeland in Crop-Specific Information or livestock grazing and feeding restrictions.

Do not apply RIFLE-D to sorghum grown for seed production.

Do not permit meat or dairy animals to consume treated crop as fodder or forage for 30 days following application.

Postemergence applications: Limited to 1 application per crop cycle. Use a maximum of 1.0 lb 2,4-D ae/acre per application.

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Band](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Band](#)

#### Pre-Harvest Interval

30 days

#### Rates

[field rates 0](#)

[field rates 1](#)

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#### Restricted Entry Interval

48 hours

#### Timings

[When weeds are small \(less than 3" tall\).](#)

[Apply to sorghum in the 3-5 leaf stage \(4-8" tall\).](#)