

PM25

352 439

1.86



ESCORT® HERBICIDE

REG. CODE 0000-000

 PACKAGE SIZE
 8 - 8 OZ. BOTTLES/CARTON

DRY FLOWABLE

ACTIVE INGREDIENT

Metsulfuron methyl

 {Methyl 2-[[[4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]-
 carbonyl]-amino)sulfonyl]benzoate}.....

BY WEIGHT

60%

INERT INGREDIENTS.....

40%

TOTAL 100%

EPA Reg. No. 352-439

U.S. Patent 4,383,113

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION! Harmful if absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

STATEMENT OF PRACTICAL TREATMENT

In case of contact with eyes, immediately flush with plenty of water. If on skin, wash with plenty of soap and water. Get medical attention if irritation persists.

For medical emergencies involving this product, call toll free 1-800-441-3637.

ENVIRONMENTAL HAZARDS

Keep out of any body of water. Do not contaminate water by cleaning of equipment or disposal of waste.

This herbicide is injurious to plants at extremely low concentrations. Nontarget plants may be adversely effected from drift and run-off.

IMPORTANT

DO NOT USE ON FOOD OR FEED CROPS. Injury to or loss of desirable trees or other plants may result from failure to observe the following: Do not apply "Escort" Herbicide (except as recommended), or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots. Do not use on lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of spray to desirable plants. Do not contaminate any body of water, including irrigation water. Keep from contact with fertilizers, insecticides, fungicides and seeds.

Following an "Escort" application, do not use sprayer for application to crops. This is extremely important, as low rates of "Escort" can kill or severely injure most crops (except small grains).

GENERAL INFORMATION

Do not use this product in California nor in the following counties of Colorado: Saguache, Rio Grande, Alamosa, Cosque and Conejos.

Du Pont "Escort" Herbicide is a dispersible granule to be mixed in water and applied as a foliar spray for control of unwanted woody plants and annual and perennial broadleaf weeds, basal soil treatment of multiflora rose, for preemergence and postemergence industrial weed control, and for the growth suppression of certain desirable grasses in noncrop areas such as airports, highways, roadsides, utility and pipeline rights-of-ways, petroleum tank farms, storage areas, pumping installations, plant sites, industrial turf, roadside turf, railroad rights-of-way and fence rows.

Warm, moist conditions following treatment promote the activity of "Escort", while cold, dry conditions may reduce or delay activity. Weeds and brush hardened off by cold weather or drought stress may not be controlled. Degree of control and duration of effect are dependent on the rate used, sensitivity and size of target species, as well as soil moisture and soil temperature.

Following use of "Escort" on some naturally-occurring biotypes, may not be effectively controlled. Biotypes are naturally-occurring individuals of the species which have a slightly different genetic makeup. Resistant biotypes may look exactly the same as susceptible biotypes but are able to survive a use rate several times higher than needed to control susceptible biotypes. To delay the occurrence of resistant biotypes, use "Escort" in tank mixes and/or sequential treatments with other registered herbicides effective on the same broadleaf weed species. Do not let weed escapes go to seed; time postemergence treatments before seed formation. Respray problem areas in a timely and effective manner using a herbicide with a different mode of action.

"Escort" is noncorrosive, nonflammable, nonvolatile and does not freeze.

Mode of Action

"Escort" rapidly stops growth of susceptible plant species; however, typical symptoms (discoloration) may not be noticeable for several weeks after application, depending on growing conditions and susceptibility. Weeds absorb "Escort" through both the foliage and roots resulting in visual effects progressing from growth inhibition to reddish-purple coloration, chlorosis, necrosis, vein discoloration and death of terminal. Initial effects are usually seen 2 or 3 weeks following application; however, the final effects on weeds are evident at about 4 to 6 weeks after application. On corn, ultimate effects occur during the season after treatment.

DIRECTIONS FOR USE

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

"Escort" Herbicide should be used only in accordance with recommendations on this label or in separate published Du Pont recommendations available through local suppliers.

Du Pont will not be responsible for losses or damages resulting from the use of this product in any manner not specifically recommended by Du Pont. User assumes all risks associated with such nonrecommended use.

Du Pont "Escort" Herbicide is recommended as a postemergence application for control of brush and certain perennial broadleaf weeds and preemergence and postemergence for weed control on noncropland. "Escort" is also recommended for weed control on established, unimproved, industrial turf and native perennial grasses. On fescue/bluegrass turf, "Escort" is recommended for growth suppression and seedhead inhibition.

For tank mixes, use the most restrictive limitations from labeling of both products.

Consult your chemical supplier, applicator, consultant, appropriate state agricultural extension service representative or your local Du Pont representatives for specific recommendations.

Non-crop (Industrial) Weed Control

"Escort" is recommended for use for general weed control on non-crop, industrial sites such as airports, military installations, fence rows, roadsides and associated rights-of-ways, lumberyards, petroleum tank farms, pipeline and utility rights-of-ways, pumping installations, railroads, storage areas, plant sites and other similar areas including governmental and private lands.

When applied at lower dosage rates (as listed below), "Escort" provides short term control of weeds listed; usage at higher rates increases length

and degree of weed control. Combinations with other herbicides such as 2,4-D, dicamba, Karmex® DF, Hyvar® X and Krovar® I DF increases the spectrum of weeds controlled. Bare ground objectives can be achieved with higher rates of "Escort" plus residual-type companion herbicides.

In states of Montana, North Dakota and South Dakota, "Escort" is for use only on railroad rights-of-ways.

"Escort" may be applied preemergence or postemergence to the weeds, but for best results, apply postemergence to young, actively growing weeds (less than 2" tall or 2" across) at any time of the year, except when ground is frozen.

"Escort" should be used during seasons when rainfall normally occurs as moisture is required to move "Escort" into the root zone of weeds before they develop an established root system. Preemergence treatments control or suppress weeds through root uptake, while postemergence works through root uptake and foliar uptake. Under limited rainfall conditions, "Escort" may not provide satisfactory weed control.

Treated soils should be left undisturbed to reduce the potential for "Escort" movement by soil erosion due to wind or water. Injury to crops may occur when treated soil is blown or moved onto land used to produce crops.

Rate selection is based on weed species, weed size and soil texture. Use the higher rates on established plants and on fine textured soils, and lower rates on smaller weeds and coarse textured soils.

Since the degree of control and duration of effect will vary with the amount of chemical applied, soil texture, soil pH, soil organic matter, weed size, rainfall and other conditions, it is suggested that users limit their first use to small areas.

For broadcast spray, apply "Escort" in a minimum of 10 gallons of water per acre. Spray volumes of 20 to 40 gallons per acre and pressures of 25 to 35 psi are preferred. Use coarse spray nozzles.

Application may also be made with a hand gun using 100 to 300 gals water per acre (as needed for coverage of weed growth).

Use the following rates of "Escort" (including surfactant at 0.25% to 0.5% by volume) to control weeds listed:

1/3 to 1/2 ounce "Escort"/acre

Annual broomweed	Corn cockle	Plantain
Annual sowthistle	Cow cockle	Redroot pigweed
Aster	Crownvetch	Redstem filaree
Bahiagrass	Dandelion	Rough fleabane
Beebalm	Dogfennel	Shepherd's purse
Bittercress	False chamomile	Smallseed falseflax
Bitter sneezeweed	Fiddleneck tarweed	Smooth nightweed
Blackeyed-susan	Field pennycress	Sweet clover
Blue mustard	Flaxweed	Tansymustard
Bur buttercup	Goldenrod	Treacle mustard
Chicory	Gumweed	Tumble mustard
Clover	Henbit	Wild carrot
Cocklebur	Lambsquarters	Wild lettuce
Goldenrod	Marestail	Wild mustard
Common chickweed	Maximillion	Wooly croton
Common groundsel	sunflower	Wood sorrel
Common mullein	Miners lettuce	Yankee weed
Common purslane	Pennsylvania	
Common yarrow	smartweed	
Conical catchfly	Plains coreopsis	

1/2 to 1 ounce "Escort"/acre

Blackberry	Curly dock	Hoary cress
Broom snakeweed	Dyer's woad	(whitetop)
(apply fall-spring)	Gorse	Multiflora rose and
Buckhorn plantain	Common sunflower	other wild roses
Canada thistle*	Prostrate knotweed	Rosering gailardia

1 to 2 ounces "Escort"/acre

Bull thistle	Poison hemlock	Salsify
Common tansy	Scotch thistle	Snowberry
Field bindweed*	Scouringrush	Musk thistle

3 to 4 ounces

Kudzu

*Suppression

SPECIAL WEED PROBLEMS

Since kochia, Russian thistle and prickly lettuce are known to have biotypes resistant to "Escort", tank mixture combinations should be used involving herbicides with different modes of action such as "Karmex" DF, "Hyvar" X, and "Krovar" I DF. These weeds should not be allowed to form mature seed and should be treated postemergence with herbicides registered for control of these weeds such as 2, 4-D and dicamba.

SELECTIVE WEED CONTROL IN TURF (INDUSTRIAL, UNIMPROVED ONLY)

"Escort" is recommended for use on unimproved industrial turf where certain grasses are well-established and desired as ground cover. An application of "Escort" may cause temporary discoloration of the grasses.

Applications can be made anytime, except when ground is frozen. Apply uniformly with properly calibrated ground equipment, using 10 to 100 gallons of spray solution per acre. Sprayer pressures of 25 to 35 psi are preferred.

Avoid overlapping and shut off spray booms while starting, turning, slowing or stopping when spraying must be taken to prevent drift; add a drift control agent to reduce drift use at least 10 gals water per acre.

Do not apply "Escort" to turf that is under stress from drought, insects, disease, cold temperatures or poor fertility, as injury may result.

Do not apply to turf less than 1 year old.

Do not use on bahiagrass turf, as severe injury will result.

Do not exceed 1/2 oz "Escort" per acre within 9 months. Use the lower rates for minimum effect (chlorosis) of turf, particularly fescue and ryegrass.

Livestock may graze treated areas 0 days after application of up to and including 3/4 oz "Escort" per acre. Do not use on grasses grown for seed.

FESCUE/BUEGRASS: Apply 1/4 to 1/2 ounce "Escort" per acre, but do not exceed 1/2 ounce per acre within a nine-month period.

CRESTED WHEATGRASS AND SMOOTH BROME: Apply 1/4 to 1 ounce "Escort" per acre for weed control in these grasses. Some chlorosis or stunting may occur following the application.

BERMUDAGRASS: Apply 1/4 to 2 ounces "Escort" per acre for weed control.

Some chlorosis or stunting may occur following the application.

Treatments listed will control the following weeds:

1/4 to 1/3 ounce "Escort"/acre

Bittercress	Chickweed	Redstem filaree
Bur buttercup	Chicory	Wild carrot
Blue mustard	Field pennycress	

1/3 to 2 ounces "Escort"/acre

(See listing under "NON-CROP WEED CONTROL")

GROWTH SUPPRESSION AND SEEDHEAD INHIBITION ("Chemical Mowing")

Fescue/Bluegrass: "Escort" is recommended for use on unimproved turf in noncropland areas for growth suppression and seedhead inhibition of well-established turf. Apply 1/4 to 1/2 ounce "Escort" anytime from after green-up until seed stalk (boot) appearance. For improved performance, apply 1/4 to 1/3 ounce "Escort" plus 1/8 to 1/4 pint "Embank" 2-S[1] per acre. Addition of a nonionic surfactant at 0.25% by volume (1 qt per 100 gals) provides maximum performance, but may temporarily increase chlorosis of turf.

SELECTIVE WEED CONTROL IN NATIVE GRASSES

BLUE GRAMA, BLUESTEMS (BIG, LITTLE, PLAINS, SAND, WW SPAR), BROMEGRASSES (MEADOW), BUFFALOGRASS, GREEN SPRANGLE-TOP, INDIANGRASS, KLEINGRASS, LOVEGRASSES (ATHERSTONE, SAND, WEEPING, WILMAN), ORCHARDGRASS, SIDEOATS GRAMA, SWITCHGRASS (BLACKWELL), WHEATGRASS (BLUEBUNCH, INTER-MEDIATE, PUBESCENT SIBERIAN, SLENDER, STREAMBANK, TALL, THICKSPIKE, WESTERN), AND WILDRYE GRASS (RUSSIAN):

Apply 1/10 oz "Escort" in a minimum of 10 gals water per acre; add 0.25% surfactant by volume where weeds have emerged.

New Seedlings

Apply preplant or preemergence where soil (seed bed) has been cultivated. Do not treat orchardgrass or Russian wildrye grass.

Established Grasses

Treat when in the seedling stage for control of:

Bur buttercup	Flaxweed*	Pigweed - redroot
(testiculate)	Lambsquarters*	and tumble
Common purslane	common wild	Crab speedwell
Common sunflower	slipleaf	Taraxacum
Cutleaf	Marestail*	Tumble mustard
eveningprimrose*		(Jim Hill)

*Weed suppression is a visual reduction in weed competition (reduced population or vigor) as compared to untreated area. Degree of suppression will vary with size of weed and environmental conditions following treatment.

Brush Control

Foliar applications should be made after brush is fully leaved until the beginning of fall leaf coloration. Complete coverage of all foliage and stems is required for brush control. Effectiveness may be reduced if rainfall occurs within 24 hours after application.

High Volume Foliar Ground Applications: Apply as a full coverage spray to foliage, stems and limbs using up to 400 gallons of total spray per acre depending on plant species, height and density of growth and on the type of spray equipment used. On tall, dense brush, it is often necessary to spray from both sides to obtain adequate coverage. Use the following amounts of "Escort" per 100 gallons of water (include surfactant at 1 quart/100 gallons) and spray to runoff for control of:

1/2 to 1 Ounce*

Ash	Cherry	Salmonberry
Aspen	Elm	Thimbleberry
Blackberry	Multiflora rose	Willow

to 2 Ounces*

Elder	Ocean spray	Red maple
Oaks	(Holodiscus)	Cottonwood

*Where mixed stands occur, use the higher rate for the most difficult-to-control species.

For broader spectrum of control, "Escort" may be tank mixed with Du Pont Krenite® S, "Arsenal" [2] triflupyr or glyphosate using labeled use rates for each product.

"Escort" at 1/2 to 1 oz plus "Krenite" S at 1 1/2 to 3 gals (plus surfactant) per 100 gals water provides improved control of black cherry and red maple; do not exceed 6 gals "Krenite" S per acre.

Low Volume Foliar Ground Applications: Apply 1 to 3 ounces "Escort" per acre in 25 to 50 gals of water plus 0.25% surfactant by volume for control of ash, cherry, elm, winged elm, black locust, red oak, tuliptree and mulberry.

For improved control of black cherry and red maple, apply 1/2 to 2 ozs "Escort" plus 1-1/2 to 3 gals "Krenite" S (plus surfactant) per acre.

Spotgun Basal Soil Treatment: For control of multiflora rose, prepare a spray suspension of "Escort" using 1 ounce product per gallon of water. Apply vigorously until "Escort" is dispersed and agitate periodically while applying the spray suspension.

Apply the spray preparation with an exact-delivery hand gun applicator. This equipment delivers a thin stream of a predetermined volume when triggered. Apply at the rate of 4 milliliters for each 2 feet of rose canopy diameter. Direct the treatment to the soil within 2 feet of the stem union of the rose to be controlled. When treating large plants and more than one delivery of "Escort" dispersion is required, make applications on opposite sides of the plant.

Applications should be made from early spring to summer, when the ground is not frozen.

Weed and Brush Control

CONIFER PLANTATIONS

Site Preparation

Loblolly Pine and Slash Pine Only

For control of blackberry and other broadleaf weeds, apply 1/2 to 1 1/2 ozs. "Escort" per acre in a minimum of 10 gals water per acre; add surfactant at 0.25% by volume (1 qt per 100 gals water). Treat blackberry plants after they have reached full leaf, but before leaf tissue has hardened. Use sufficient spray volume for complete coverage of these plants.

Apply as a full coverage spray to foliage and stems. Total spray volume per acre will depend upon plant height and density of growth, and the type of equipment used.

For control of diffuse knapweed, Japanese honeysuckle, palmetto, black cherry and black locust, apply 3 1/3 ozs "Escort" per acre.

For control of annual weeds, apply at rates under "Selective Weed Control." Best results occur when annuals are treated just prior to emergence or in the seedling stage.

Poor weed control may occur from application made when the soil is saturated with water and rain is received within 24 hours. Do not use on poorly drained or marshy sites.

Loblolly pine may be transplanted into treated areas 4 months after application and slash pine the following season, at least 6 months after application of "Escort".

For broader spectrum control, "Escort" should be tank-mixed with Velpar® L Herbicide or Roundup [3] or "Arsenal". For aerial application of combinations, follow directions on the package label of the companion product in addition to "Escort" directions above; see labels for additional plants controlled. Follow all restrictions on labeling of both products in the tank mixes.

Douglas Fir

For control of blackberry and other broadleaf weeds, apply 1/2 to 1 oz "Escort" per acre in the spring, as described above.

Douglas fir may be transplanted into the treated area the next season.

For broader spectrum control, "Escort" should be tank-mixed with "Velpar" L Herbicide. Use "Velpar" L as directed on the package.

Release

Loblolly Pine (Established plantations at least 1 year old)

For control of blackberry, apply 1/2 to 1 1/2 oz "Escort" per acre in a minimum of 10 gals water per acre; add surfactant at 0.25% by volume (1 qt/100 gals water). Treat plants when they have reached full leaf but before leaf tissue has hardened in the fall. Treatment will also control many annual broadleaf weeds (see Weed Control).

For broader spectrum brush control "Escort" should be tank-mixed with "Velpar" L (or "Velpar" as directed on package labeling) or with "Arsenal" on loblolly plantations at least 2 years old as follows:

Apply 0.5 to 1.5 oz "Escort" plus 1 pt "Arsenal" in 5 to 30 gals per acre; add 0.25% (by volume) non-ionic surfactant to the tank mix. A foam-reducing agent may be added at the recommended rate, if needed.

Apply during summer to late fall (preferred) by helicopter as described on the "Arsenal" container label. Application may also be applied by ground spray equipment.

In addition to brush species listed on "Arsenal" labeling, the combination controls or improves control of blackberry, black gum, elm, winged elm, and cherry. Additionally, the combination controls many weeds as shown on product labels.

Do not apply where conifers are suffering from loss of vigor caused by insects, disease, drought, winter damage, or other stresses, as injury may result. Excessive injury may result to conifers less than 4 years of age from transplanting on coarse-textured soils, and less than 3 years of age from transplanting on medium and fine-textured soils. Use on gravelly or rocky soils and exposed subsoils may cause injury or mortality to conifers. Poor weed and brush control may occur from application made when the soil is saturated with water and rain is imminent within 24 hours. Do not use on poorly drained or marshy sites.

Livestock may graze treated areas 0 days after application of up to and including 3/4 oz "Escort" per acre.

USE PRECAUTIONS

Do not apply to any body of water, including streams, irrigation water or wells. Do not apply where runoff water may flow onto agricultural land, as injury to crops may result.

Do not apply "Escort" during periods of intense rainfall or to water-saturated soils as off-target movement may occur.

Do not apply to impervious substrates such as paved or highly compacted surfaces nor to frozen ground as off-target movement will occur.

Do not allow spray to drift onto adjacent crops or other desirable plants or trees as injury may occur.

Do not use on lawns, golf courses, athletic fields, commercial sod operations, or other high-maintenance, fine turfgrass areas.

Do not apply this product through any type of irrigation system.

In areas where sensitive crops are grown, make applications to soils whose surface has been settled by rain. Do not treat powdery dry soil or light sandy soils, when there is little likelihood of rainfall soon after treatment, as wind may cause off-target movement.

Following an "Escort" application, do not use sprayer for application to crops. This is extremely important, as low rates of "Escort" can kill or severely injure most crops except small grains).

SPRAY PREPARATION

Fill the spray tank half full of water and, with agitator running, add the proper amount of "Escort". Finish adding the required amount of water. Continuous agitation is required to keep the product in suspension. For postemergence applications, a nonionic surfactant of at least 80% active ingredient may be added to improve wetting and/or contact activity. To minimize drift, a drift control agent may be added at the recommended

label rate. "Escort" spray preparations may degrade in acidic solutions below pH 7 if not used in 24 hours; they are stable in alkaline solutions. Thoroughly reagitrate before using. Tank mixes with other registered herbicides should be tested for compatibility before full scale mixing.

Sprayer Agitation: Use mechanical or bypass agitation to thoroughly mix the spray solution. After initial mixing, do not use excessive agitation when using a surfactant as foaming problems may result. To avoid foaming problems, use antifoam agents.

SPRAYER CLEANUP

Immediately after spraying, thoroughly remove all traces of "Escort" from mixing and spray equipment as follows:

1. Drain tank, rinse interior surfaces of tank; then flush tank, boom and hoses with clean water from a minimum of 5 minutes.
2. Partially fill the tank with clean water, then add cleaning solution*. Complete filling of the tank with clean water. Flush solution through boom, hoses, and nozzles, then allow to sit for 15 minutes with agitation running; then drain.
3. Repeat Step 2.
4. Repeat Step 1.
5. Nozzles, screens, and strainers should then be removed and cleaned separately.
6. To remove traces of cleaning solution, rinse the tank thoroughly with clean water and flush through hoses and boom.
7. Flush boom and hoses with clean water for 5 minutes just prior to using the sprayer for the first time after the "Escort" application.

* Use any of the following cleaning solutions:

1. One gallon ammonia (containing 3% active ingredient) per 100 gallons of water.
2. Nutra-sol[4] (carefully read and follow Nutra-sol label directions).
3. Loveland Spray Tank Cleaner[5] (carefully read and follow Loveland Spray Tank Cleaner label directions).
4. Tank-Aid[6] (carefully read and follow Tank-Aid label directions).

CAUTION: Do not use chlorine bleach with ammonia. All traces of liquid fertilizer containing ammonia, ammonium nitrate or ammonium sulphate must be rinsed with water from the mixing and application equipment before adding chlorine bleach solution. Failure to do so will release a gas with a musty chlorine odor which can cause eye, nose, throat and lung irritation. Do not clean equipment in an enclosed area.

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STORAGE AND DISPOSAL

STORAGE: Store product in original container, away from other pesticides, fertilizer, food or feed.

PRODUCT DISPOSAL: Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent) the container and then offer for recycling or reconditioning, or puncture and dispose of in a sanitary land fill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

NOTICE TO BUYER: Purchase of this material does not confer any rights under patents of countries outside of the United States.

NOTICE OF WARRANTY

Du Pont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with the use of this product. Injury to adjacent crops, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other material, or the manner of use or application, all of which are beyond the control of Du Pont. In no case shall Du Pont be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer. DU PONT MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

- (1) Registered trademark of 3M Agricultural Products
- (2) Registered trademark of American Cyanamid Company.
- (3) Registered trademark of Monsanto Company
- (4) Sold by Thomas G. Killfoil
- (5) Registered trademark of Loveland Tank Cleaner
- (6) Manufactured for Combelt Chemical Company

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