

# DuPont™ Streamline™

herbicide

## Technical Bulletin

*DuPont™ Streamline™ herbicide is a developmental product for which an application has not yet been filed with EPA. This developmental product is not registered for use and sale in the United States, and no sale, offer for sale or use of this product may be made unless and until all necessary federal and state registrations have been obtained.*

DuPont™ Streamline™ herbicide is being developed to help improve the safety of utility and roadside rights of way by eliminating encroaching weed and brush species.

### Product Profile (based on DuPont field trials)

- Low use rate
- Broad-spectrum weed control
- Control of difficult brush species such as box elder, hackberry and mesquite
- Selectivity to many perennial and native grasses
- Low impact on mammals, wildlife and the environment



## BIOLOGICAL ACTIVITY AND USE

### General Information

DuPont™ Streamline™ herbicide is a dispersible granule that is mixed in water and applied as a spray. Streamline™ will be used for general weed and brush control for non-crop applications on private, public and military lands.

In field trials Streamline™ provided preemergence and/or postemergence control of broadleaf weed species. For perennial species, a postemergence application will be required for best control.

### Mode of Action

Streamline™ herbicide is being developed by DuPont to control a broad spectrum of broadleaf weeds through two modes of action.

Streamline™ combines a new synthetic auxin mode of action with a sulfonylurea herbicide. Having two modes of action allows better weed management by providing a wider spectrum of broadleaf weed control, including ALS- and glyphosate-resistant weeds. Streamline™ is being developed to help restore natural grasses and control encroaching weed species to improve public roadside safety.

### Use Rate and Biological Activity

Streamline™ has been applied in field trials at use rates of 1.5 to 5.0 ounces per acre for broadleaf weeds and 7.0 to 11.5 ounces per acre for brush control. When applied as a spray, Streamline™ is absorbed by both roots and foliage of plants, rapidly inhibiting the growth of susceptible weeds. Warm, moist conditions following application accelerate the herbicidal activity of Streamline™; cold, dry conditions delay the herbicidal activity. Weeds hardened off by drought or other plant stresses are less susceptible to Streamline™.



## WEED CONTROL SPECTRUM DuPont™ Streamline™ herbicide

### PARTIAL LISTING

Broadleaf Weeds	Brush Species
Bindweed, field	Ash
Bull thistle	Black locust
Chicory	Blackberry
Dandelion	Box elder
Goldenrod	Eastern red cedar
Halogeton	Hackberry
Knapweed: diffuse, spotted, Russian	Honeysuckle
Kochia	Maple, red
Marestail/Horseweed	Mesquite
Mullein, common	Multiflora rose
Pepperweed, perennial	Poplar, yellow
Prickly lettuce	Snowberry
Russian thistle	Sugarberry
Sericea Lespedeza	Sumac
Sowthistle, annual	Tree of Heaven ( <i>Ailanthus Altissima</i> )
Spurge, leafy	Willow
Teasel	
Yarrow, common	

NOTE: The degree and duration of control may depend on the weed spectrum and infestation intensity, weed size at application, soil type, organic matter content and environment conditions at and following application.



### Uptake, Absorption and Translocation Characteristics

Streamline™ is absorbed by both roots and shoots and translocates throughout the plant in the xylem and phloem. Field trials demonstrated Streamline™ is especially active on young, actively growing weeds.

### Soil Activity and Degradation

Field trials demonstrated that Streamline™ is biologically active in soil and can be taken up by plant roots to provide control. It does not stop germination but controls young, actively germinating weeds with uptake through both the roots and shoots. Few other products have this double uptake mechanism, which provides good control under both low rainfall and high rainfall conditions. Streamline™ is degraded in soil by microbes, hydrolysis and, to a lesser extent, by



photolysis to biologically inactive products.

Streamline™ will provide longer residual under cool and dry conditions and where soil pH is alkaline. Soil texture and organic matter (OM) have moderate effects on use rates as Streamline™ is not bound tightly to either OM or clay.

### Plant Selectivity, Sensitivity and Residues

Streamline™ herbicide is a developmental product for use in non-crop situations only, and care should be exercised when it is used in the vicinity of crop plants. Exposure to Streamline™ may injure or kill most crops.

### Toxicity and Metabolism in Animals

Studies have shown that the active ingredients in Streamline™ have low toxicity to mammals, birds and insects. These active ingredients are rapidly absorbed and eliminated in warm- and cold-blooded animals and do not bioaccumulate.

### RESIDUES IN FOOD — Not Applicable.

For non-crop use only.

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*The information contained in this document is based on the latest to-date technical information available to DuPont, and DuPont reserves the right to update the information at any time.*

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