

Freehand® 1.75G Herbicide

 **BASF**
The Chemical Company

Breakthrough Broad-Spectrum Control

FreeHand® 1.75G herbicide offers the ornamental grower and landscape manager a new tool for preemergence weed control of annual grasses, susceptible sedge species and many small-seeded broadleaf weeds. Introducing dimethenamid-P, a partner for pendimethalin and a new active ingredient for use in ornamentals.

- A non-burning herbicide combination product for broad-spectrum weed control
- Flexibility of rate, 100-200 lbs./A, when used across a wide number of weed species
- Excellent residual control in container media, that stops weeds as they germinate
- Wide range of plant species tolerance and use sites
- Excellent particle distribution and formulation, granular ballistics for spreading

Grasses, Broadleaf and Sedge Species Controlled

All the benefits of the dimethenamid-P active ingredient combined with the strengths of pendimethalin result in control of species not previously observed when delivered in one product.

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|-------------------------|----------------------|----------------------------|
| • American burnweed* | • Doveweed | • Pearlwort* |
| • Annual bluegrass | • Eclipta | • Pepperweed* |
| • Annual kyllinga spp.* | • Foxtail | • Phyllanthus* |
| • Barnyardgrass | • Goosegrass | • Purslane |
| • Crabgrass spp. | • Henbit | • Rice flatsedge |
| • Dogfennel* | • Italian ryegrass | • Shepherdspurse |
| | • Lambsquarters spp. | • Smartweed spp. |
| | • Liverwort* | • Spurge spp. |
| | • Mayweed chamomile | • Willowherb spp. |
| | • Nightshade spp. | • Woodsorrel (Oxalis spp.) |
| | • Panicum spp. | • Yellow nutsedge |

Weeds listed above can be controlled when **FreeHand 1.75G** is applied at rate ranges of 100-200 lbs./A as listed on the product label. Higher rates will control a greater number of species and provide longer residual per application.

*Not controlled in California.



Use Sites:

- Container, Liner and Field Commercial Nurseries
- Christmas Trees and Other Forest Tree Nurseries
- Landscape Ornamentals in Maintained Areas (Residential and Commercial)
- General Grounds Maintenance in Specified Noncrop Areas

Formulation: 1.75G (Granular)

Provides 0.75% dimethenamid-P and 1% pendimethalin

Packaging: 37.5 lb. and 50 lb. bags

Active Ingredient: Dimethenamid-P and pendimethalin

Chemical Family: Combines Chemical Group 15, chloroacetamide herbicide, with Group 3, dinitroaniline herbicide

Mode of Action: The two active ingredients combined inhibit cell growth in both seedling shoots and plant cell microtubule assembly, preventing roots of susceptible weed species from growing and multiplying.

Behavior in Plant: Root and shoot absorbed with coleoptile absorption in highly sensitive grass, sedge and broadleaf species.

Use Rates:

- 100, 150 and 200 lbs./A for commercial ornamental production
- 2.3-4.6 lbs./1,000 sq. ft. in ornamental landscape or general maintenance areas

Control Symptoms: Emerging grass and sedge shoots and broadleaf shoots and roots controlling susceptible weeds as they germinate.

Signal Word: CAUTION

REI: 24 hours for production ornamentals

PPE: Long-sleeved shirt and long pants; chemical-resistant gloves made of any waterproof materials; shoes and socks; protective eyewear



Keys to Success

- Uniform coverage prior to weed germination and emergence insures optimal weed control.
 - **Application to dry foliage is recommended.**
 - Efficacy will be improved if application is followed by one-half inch of irrigation or equivalent in rainfall.
 - Use lowest label rate and avoid overlap on grower-identified sensitive plant species or as stated on label.
- The following plant species have been injured by applications of FreeHand 1.75G:** Black-eyed Susan, Blue Fescue, Purple Coneflower, Feather Reed Grass and Leadwort.

FreeHand 1.75G has not been tested in all production systems, including plantlets from various plug size trays. Applications made to herbaceous plugs stuck from trays greater than 100 count/tray are considered too small for an initial herbicide application to be made with safety. The grower assumes responsibility to test on a number of plant species and under his system prior to an application with **FreeHand 1.75G**.

To avoid weed shifts and development of hard-to-control species, use this product in rotation with other ornamental registered products for nursery and landscape uses. Practice good product stewardship and resistance weed management. However, if desired, a sequential application of **FreeHand 1.75G** can be applied following 8 weeks, with no greater than 200 lbs./A of product at any application. No more than 400 lbs./A of **FreeHand 1.75G** may be applied during the growing season. *See label for specific restrictions and always read and follow label directions.*

FREEHAND 1.75G HERBICIDE WEED CONTROL AS COMPARED TO INDUSTRY STANDARDS*

PREEMERGENCE HERBICIDE PERFORMANCE	FreeHand	Snapshot®	OH2®	Rout®	BroadStar™	Pennant MAGNUM®
	Crabgrass	G	G	G	G	F-G
Goosegrass	G	G	NR	G	F-G	F
Bittercress	G	F-G	G	G	G	F
Eclipta	G	P-F	F	NR	F	NR
N. Willowherb	G	P	P	G	NR	NR
Chickweed spp.	G	G	F-G	F-G	F	P
Spurge spp.	G	F-G	F-G	G	G	NR
Doveweed	G	NR	NR	NR	G	NR
Sedges**	G	NR	NR	NR	NR	G

G=Good (80-100% control);
 F=Fair (50-80% control);
 P=Poor (0-50% control);
 NR=Not Registered or herbicide not labeled for this species
FreeHand 1.75G
 (dimethenamid-P+pendimethalin);
 Snapshot (isoxaben+trifluralin);
 OH2 (oxyfluorfen+pendimethalin);
 Rout (oxyfluorfen+oryzalin);
 Broadstar (flumioxazin);
 Pennant MAGNUM (s-metolachlor)

* Ratings for competitive products extracted with permission from Neal (North Carolina State University) and Derr (Virginia Tech University) Weeds of Container Nurseries in the US publication; 2005, North Carolina Nurserymen Association, Inc. Ratings for **FreeHand 1.75G** based on trials conducted 2004-2008 by BASF and university experts and based on G=80% or better control.

**Rice flatsedge, yellow nutsedge and annual kyllinga spp.

Photos courtesy of invasive.org



Eclipta



Crabgrass



Yellow Nutsedge



Oxalis

Always read and follow label directions.

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