

Tower® Herbicide

BASF
The Chemical Company

A New Preemergent for Control of Tough Golf Course Turfgrass Weeds

Tower® herbicide is a broad-spectrum preemergence herbicide with a new active ingredient, dimethenamid-p (DMTA-P), for use in golf course turfgrass and ornamental landscape management. Highly effective on many small-seeded broadleaf weeds, **Tower** also controls numerous grassy weeds, several annual sedges and yellow nutsedge. **Tower** controls susceptible weed species as an inhibitor of shoot formation and cell development. Application timings can take advantage of a wider use pattern with preemergence applications on hard-to-control species such as goosegrass, as well as broadleaf weeds such as spurge and doveweed.

	Mode of Action	Length of Control	Broad Spectrum	Plant Safety	Preemergence Control
Key Feature	Different class of chemistry from DNA's	As a stand-alone it provides great control of key weeds for 60+ days, or even longer when used in a tank-mix with other preemergents (see program on back)	Controls more weed species than other preemergent herbicides	Can be used on cool- and warm-season turfgrasses	Liquid application and cost-effective strategy for control of troublesome species
Key Benefit	Allows for good rotation and weed resistance management	Allows for reasonable seeding and sprigging intervals	Controls key weeds including goosegrass, spurge, doveweed and nutsedge	Provides flexibility in managing various turfgrass weeds	Provides for preemergence control of sedges and doveweed

Weeds Controlled

- Annual Bluegrass*
- Barnyardgrass
- Bittercress (Hairy)
- Carpetweed
- Crabgrass
- Cupgrass (Southwestern)
- Doveweed
- Eclipta
- Fall Panicum
- Florida Pusley
- Foxtails
- Goosegrass
- Nightshade spp.
- Nutsedge (Yellow*)
- Pigweed spp.
- Ryegrass (Italian)
- Sandbur (Field)
- Shepherdspurse
- Sedges (Annual)
- Signalgrass (Broadleaf)
- Spurge spp.
- Willowherb



Use Sites:

Golf courses (not on greens), landscape or grounds maintenance, mulch beds, jogging and bike trails, noncrop areas, parking lots, fence lines, highway rights-of-way, Christmas tree plantations, field grown nurseries

Not for use on residential turfgrass, recreational turfgrass, lawns, sod farms, on container-grown ornamentals or in greenhouses.

Formulation: 6.0 EC (liquid)

Packaging: 1 x 5 gal.; 4 x 0.5 gal.

Active Ingredient: Dimethenamid-p

Chemical Family: Chloroacetamide (Group 15)

Mode of Action: Interferes with cell development.

Behavior in Plant: Inhibits seedling shoots

Use Rates: Low: 21 oz. per acre or 0.5 oz./1,000 sq. ft. High: 32 oz. per acre or 0.75 oz./1,000 sq. ft.

NOTE: Total cumulative maximum amount of 64 oz. per acre per year from sequential applications

Signal Word: WARNING

REI: 12 hours

PPE: Coveralls; chemical-resistant gloves; shoes plus socks

Tower is safe on established cool- and warm-season turfgrass species including bentgrass,† perennial ryegrass, and bluegrass fairways and Bermudagrass, zoysiagrass, seashore paspalum and St. Augustinegrass.

†Consult label for rate restriction on bentgrass.

*Denotes partial control or suppression only of the weed. (See label for complete list of weeds controlled.)

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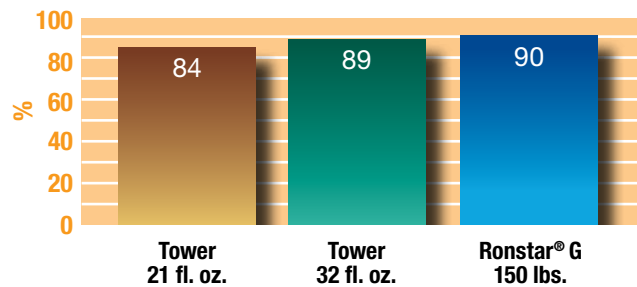
Keys to Success

Tower may be used on tees, fairways, roughs and other amenity turfgrass around common areas. Do not use on putting greens or in areas where *Poa annua* (annual bluegrass) is a significant percentage of the turfgrass stand. When using **Tower** you should delay overseeding for one month following application and delay sprigging for two months following establishment. In addition, you should delay reseeding of treated turfgrass for at least one month following the last **Tower** application.

Avoid applications of **Tower** to fall-planted overseed stands during the very early spring months as discoloration and thinning may occur if moderate cold to extreme cold temperatures are experienced.

Tower may be tank-mixed with **Pendulum® AquaCap™ herbicide** or with other herbicides labeled for use in turfgrass on golf courses. When tank-mixing with **Pendulum AquaCap**, first add **Pendulum AquaCap** to the partially filled spray tank while agitating, then add **Tower**. Fill the remainder of the spray tank with water while agitating. BASF recommends testing other **Tower** tank mixes on a small portion of the target turf to determine if damage is likely to occur.

Percent Goosegrass Control



2004-2008 trials n=10

Tower applied as May sequential behind **Pendulum AquaCap** @ 3.1 pts early Spring. Ronstar applied early Spring. Overall Days After Treatment (DAT) 1 (189) and DAT2 (65)

Weed Control Strategies in Turfgrass With **Tower**

Target Species	Herbicide(s) Rates
Broad-Spectrum Preemergence Weed Control (Grass, Broadleaf, Sedge)	Tower @ 21-32 fl oz./A + Pendulum AquaCap @ 3.1-4.2 pts./A Tank-mix allows for reapplication at 5-8 week interval through season (rate-specific)
Goosegrass Control	Option 1: Pendulum AquaCap @ 3.1-4.2 pts./A applied early spring followed by Tower @ 32 oz./A in late spring Option 2: Tower @ 32 fl oz./A followed by Tower @ 32 fl oz./A early and late spring as a 5-8 week sequential Option 3: Three applications of Tower @ 21 fl oz. starting in the early spring every 5-8 weeks through early summer
Doveweed Control	Option 1: Tower @ 32 fl oz./A followed by Tower @ 32 fl oz./A early and late spring as a 5-8 week sequential Option 2: Three applications of Tower @ 21 fl oz. timed prior to germination in the spring and repeat every 5-8 weeks through summer
Non-Overseeded Dormant Bermudagrass Annual Bluegrass Winter Weed Control	Option 1: Tower @ 21-32 fl oz./A tank-mixed with Round-Up® (standard rate) Option 2: Tower @ 21-32 fl oz./A + Pendulum AquaCap @ 3.1 pts./A tank-mixed with Round-Up (standard rate)



Goosegrass



Yellow Nutsedge



Spurge



Doveweed

GOOSEGRASS: JOHN D. BYRD, MISSISSIPPI STATE UNIVERSITY, BUGWOOD.ORG
YELLOW NUTSEDGE: JOHN CARDINA, OHIO STATE UNIVERSITY, INVASIVE.ORG
DOVEWEED: JOHN D. BYRD, MISSISSIPPI STATE UNIVERSITY, BUGWOOD.ORG

Always read and follow label directions.

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