

## Tank Mix Compatibility & Phytotoxicity

### Physical Compatibility of One Way Tank Mixes with Revolution®

Revolution® was mixed with the highest labeled rates of a variety of commonly used turf chemicals, and compatibility was assessed at 0 hour and 1 hour in a jar test. Tank mix compatibility was evaluated by assessing agitation requirements, as well as the ability to form a

Table 1. Cherry Hill, NJ

Product	0 Hours	1 Hour
Primo	Yes	Yes
Trimmit	Yes	Yes
Proxy	Yes	Yes
Confront	Yes	Yes
Trimec	Yes	Yes
Merit	Yes	Yes
Mach 2	Yes	Yes
Sevin	Yes	Yes
PCNB	Yes	Agitation Required*
Dimension	Yes	Agitation Required*
Acclaim	Yes	Agitation Required*

\* Mild agitation required to return settled turf chemicals to a homogeneous, sprayable solution.

homogeneous, sprayable solution. All turf chemicals tested were physically compatible with Revolution. When phase separation did occur, agitation was required to return the tank mix to a soluble, sprayable solution.

Table 2. Atlanta, GA

Product	0 Hours	1 Hour
26GT	Yes	Yes
Banner Max	Yes	Yes
Banol	Yes	Yes
Fore	Yes	Yes
Subdue Maxx	Yes	Yes
Compass	Yes	Yes
Bentgrass Special	Agitation Required*	Yes
Bayleton	Agitation Required*	Agitation Required*
Cleary's 3336	Agitation Required*	Agitation Required*
Daconil W.S.	Agitation Required*	Agitation Required*
Ferromec	Agitation Required*	Agitation Required*

### Phytotoxicity Evaluation of One Way Tank Mix Applications with Revolution®

After determining tank mix compatibility, these combinations containing chemicals at their **highest labeled rate** were applied to turfgrass to determine phytotoxicity. Tank mixes were applied to turf under **stressful environmental conditions** (high temperatures and full sun) and a **post-treatment syringe cycle was not applied**. Phytotoxicity was evaluated as none (completely safe), low (slight tip burn), moderate

(yellowing of turf) and severe (severe yellowing of turf); severe phytotoxicity indicates a combination that is not safe for turf use. Tank mixes of Revolution® in combination with either 26GT (Iprodione) or Banner (Propiconazole) caused severe phytotoxicity and are not recommended for turf use.

Table 3. Cherry Hill, NJ - applications made to bentgrass nursery

Product	Active Ingredient	Phytotoxicity
Proxy	Ethephon	None
Acclaim	Fenoxaprop	None
Merit	Imidachlorprid	None
Mach 2	Halofenozide	None
Sevin	Carbaryl	None
PCNB	Pentachloronitrobenzene	None
Primo	Trinexapac-ethyl	Moderate
Trimmit	Paclobutrazol	Moderate
Confront	Clopyralid + Triclopyr	Moderate
Trimec	2,4- D, Mecoprop + Dicamba	Moderate
Dimension	Dithiopyr	Moderate

Table 4. Atlanta, GA - applications made to 70% bentgrass/30% Poa Annua green

Product	Active Ingredient	Phytotoxicity
Subdue Maxx	Mefonoxem	None
Daconil W.S.	Chlorothalonil	None
Fore	Mancozeb	None
Bentgrass Special	Fertilizer 28-5-18	None
Ferromec	Fertilizer 15-0-0, 6% Fe	None
Cleary's 3336	Thiophanate Methyl	None
Bayleton	Triadimefon	Low
Banol	Propamocarb hydrochloride	Low
Compass	Trifloxystrobin	Low
26GT	Iprodione	Severe
Banner Max	Propiconazole	Severe

While most of the above tank mix combinations were shown to be safe in this research trial, turf managers are strongly encouraged to do their own testing of a particular tank mix combination. It is impossible to test for the wide range of environmental and climatic conditions that could be encountered on every golf course. Before large-scale

applications of a tank mix are made, a compatibility jar test and strip test (application of the mixture to a small turf area) should be performed. Applicators should review all product labels prior to tank mixing. Certain products carry specific recommendations and/ or warnings/prohibitions on tank mixing.