



# Current Report

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## Components and Ratios of Pre-mix Herbicides for Use in Winter Wheat

Joe Armstrong

Extension Weed Science Specialist

Many herbicide options for winter wheat comprise multiple active ingredients to broaden the spectrum of weed species controlled. Herbicides are also combined to include additional modes of action so that development of herbicide-resistant weeds can be prevented or delayed. Knowing the amount of the individual herbicides in the pre-mix is useful for deciding if additional product should be applied to further improve weed control.

The following table lists several pre-mix herbicides la-

beled for use in winter wheat and the equivalent rates of the individual components. Use rates for pre-mix herbicides are based on label recommendations for medium texture soils with 1.5 percent organic matter and pH of 6.5. Use rates can vary depending on soil characteristics and planned follow-up herbicide applications. *Before using any herbicide, always consult the label for appropriate rates, tank-mix partners, plant-back intervals, geographic restrictions, and other special instructions.*

Pre-mix herbicide (manufacturer)	Use rate per acre	Component herbicides	Equivalent rates (per acre)	Herbicide Mode of Action
Affinity BroadSpec (DuPont)	1 oz	Harmony 50 SG	0.5 oz	ALS inhibitor
		Express 50 SG	0.5 oz	ALS inhibitor
Agility SG (DuPont)	1.6 oz	Harmony 50 SG	0.15 oz	ALS inhibitor
		Express 50 SG	0.08 oz	ALS inhibitor
		Ally XP	0.05 oz	ALS inhibitor
		dicamba	2 fl oz (4 lb ai/gal)	Growth regulator
Ally Extra SG (DuPont)	0.5 oz	Harmony 50 SG	0.27 oz	ALS inhibitor
		Express 50 SG	0.14 oz	ALS inhibitor
		Ally XP	0.09 oz	ALS inhibitor
Axiom DF (Bayer)	8 oz	Define 60 DF*	7.25 oz	Shoot inhibitor
		Sencor 75 DF	1.45 oz	PS II inhibitor
Finesse (DuPont)	0.5 oz	Glean	0.42 oz	ALS inhibitor
		Ally XP	0.10 oz	ALS inhibitor
Finesse Grass & Broadleaf (DuPont)	0.9 oz	Glean	0.60 oz	ALS inhibitor
		Everest	0.30 oz	ALS inhibitor
Harmony Extra SG (DuPont)	0.9 oz	Harmony 50 SG	0.60 oz	ALS inhibitor
		Express 50 SG	0.30 oz	ALS inhibitor
Huskie (Bayer)	13.5 fl oz	Buctril	11.8 fl oz (2 lb ai/gal)	PS II inhibitor
		pyrasulfatole	0.033 lb ai	Pigment inhibitor
Olympus Flex (Bayer)	3.5 oz	Olympus	0.34 oz	ALS inhibitor
		Osprey	3.5 oz	ALS inhibitor
Rage D-Tech (FMC)	8 fl oz	Aim	0.52 oz	PPO inhibitor
		2,4-D ester	11.8 fl oz (4 lb ai/gal)	Growth regulator
Rave (Syngenta)	4 oz	Amber	0.47 oz	ALS inhibitor
		dicamba	4 fl oz (4 lb ai/gal)	Growth regulator

\*Define, applied alone, is not labeled for use in winter wheat.

**Abbreviations:**

oz = ounce  
fl oz = fluid ounce  
gal = gallon  
lb = pound  
pt = pint  
qt = quart

ai = active ingredient  
DF = dry flowable  
DG = dry granule  
EC=emulsifiableconcentrate  
SG = soluble granule

**Additional resources**

For more information on herbicide modes of action, please see OSU Extension Fact Sheet PSS-2778 "Understanding Herbicide Mode of Action."

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