


Herbicide Mixing Guide -- Chequamegon-Nicolet National Forest


Always read label. These are products purchased for invasive control on this forest.

Total Volume Desired* (amt. Colorant)	Roundup Pro® glyphosate (41% active ingredient)			
	1% a.i.	2% a.i.	3% a.i.	20% a.i.
8 oz. (1/4 tsp)	1 tsp	2 tsp	3tsp	4 oz
16 oz. (1/2 tsp)	2 tsp	4 ½ tsp	1.2 oz	8 oz
1 qt. (1 ½ tsp)	4 ½ tsp	1.5 oz	2.4 oz	16 oz
½ gal (3 tsp)	1.5 oz	3 oz	4.7 oz	1 qt
1 gal. (2 Tbls)	3 oz	6.2 oz	9.4 oz	----
2 gals (4 Tbls)	6 oz	12.4 oz	19 oz	----
5 gals (1/2 cup)	15.5 oz	31 oz	47 oz	----

* put half of desired volume of water in sprayer, add herbicide & color, then add water to final volume

Total Volume Desired* (amt. Colorant)	Plateau® solution ¹ - imazapic (Plateau is 24% active ingredient)		
	0. 5% solution	1% solution	1.5% solution
8 oz + (1/4 tsp)	¼ tsp + 1/8 tsp SilcoVM	½ tsp + 1/8 tsp SilcoVM	¾ tsp + 1/8 tsp SilcoVM
16 oz + (1/2 tsp)	½ tsp + ¼ tsp SilcoVM	1 tsp + ¼ tsp SilcoVM	1½ tsp+ ½ tsp SilcoVM
1 qt + (1 ½ tsp)	1 tsp + ½ tsp SilcoVM	2 tsp + ½ tsp SilcoVM	3 tsp + ½ tsp SilcoVM
½ gal + (3 tsp)	2 tsp + 1 tsp SilcoVM	4 tsp + 1 tsp SilcoVM	1 oz + 1 tsp SilcoVM
1 gal + (2 Tbls)	4 tsp + 2 tsp SilcoVM	1.3oz + 2 tsp SilcoVM	2oz +2 tsp SilcoVM
2 gals + (4 Tbls)	8 tsp + 4 tsp SilcoVM	2.6 oz + 4 tsp SilcoVM	4 oz + 4 tsp SilcoVM
5 gals + (1/2 cup)	3 oz + 3 Tbls SilcoVM	6.5 oz + 3 Tbls SilcoVM	10 oz + 3 Tbls SilcoVM

* put half of desired volume of water in sprayer, add herbicide & color, then add water to final volume

¹ Can squeeze to measure 1 oz . Label recommends 0.25 to 1.5% solution of Plateau.

SilcoVM = nonionic surfactant, (per SilcoVM label)

Total Volume Desired* (amt. Colorant)	Transline® solution ² - clopyralid (Transline is 40.9 active ingredient)	
	0.5% solution	0.75% solution
8 oz (1/4 tsp)		
16 oz (1/2 tsp)	½ tsp + ¼ tsp SilcoVM ®	¾ tsp + ¼ tsp SilcoVM
1 qt (1 ½ tsp)	1 tsp + ½ tsp SilcoVM	1 ½ tsp + ½ tsp SilcoVM
½ gal (3 tsp)	2 tsp + 1 tsp SilcoVM	½ oz + 1 tsp SilcoVM
1 gal (2 Tbls)	4 tsp + 2 tsp SilcoVM	1 oz + 2 tsp SilcoVM
2 gals (4 Tbls)	8 tsp + 4 tsp SilcoVM	2 oz + 4 tsp SilcoVM
5 gals (1/2 cup)	3.3 oz + 3 Tbls SilcoVM	5 oz + 3 Tbls SilcoVM

* put half of desired volume of water in sprayer, add herbicide & color, then add water to final volume

² Label directions say 1-3 qt/100 gal total Transline solution 0.5% is 2qt/100gal (middle dose)

SilcoVM = nonionic surfactant apply at 2pts/100 gal (0.75-4 pts per 100 gal.= middle dose) (SilcoVM label)

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Total Volume Desired* (amt. Colorant)	Garlon 3A ® solution - triclopyr (Garlon 3A is 44.4% active ingredient)		
	1.5% solution	50% solution	100% solution
8 oz (1/4 tsp)	.75 tsp	4 oz (1/2 cup)	8 oz (straight Garlon 3A add color)
16 oz (1/2 tsp)	1.5 tsp	8 oz (1 cup)	16 oz (straight Garlon 3A add color)
1 qt (1 ½ tsp)	3 tsp	16 oz (2 cups)	1 qt (straight Garlon 3A add color)
½ gal (3 tsp)	1 oz (6 tsp)	1 qt (4 cups)	½ gal (straight Garlon 3A add color)
1 gal (2 Tbls)	2 oz	2 qts	1 gal (straight Garlon 3A add color)
2 gals (4 Tbls)	4 oz (1/2 cup)	--	--
5 gals (1/2 cup)	10 oz (1 ¼ cups)	--	--

* put half of desired volume of water in sprayer, add herbicide, then add water to final volume

Total Volume Desired** mix w/ oil, not water	Garlon 4 ® solution - triclopyr (Garlon4 is 61.6% active ingredient)		
	20% solution	25% solution	30% solution
8 oz	1.6 oz (3 Tbls)	2 oz (1/4 cup)	2.4 oz
16 oz	3.2 oz (6.4 Tbls)	4 oz (1/2 cup)	4.8 oz
1 qt	6.4 oz (13 Tbls)	8 oz (1 cup)	9.5 oz
½ gal	13 oz (1 ½ cups)	16 oz (2 cups)	19 oz
1 gal	25.6 oz	32 oz	38.4 oz
2 gals	--	--	
5 gals	--	--	

** Garlon4 mixes in basal oil ... Bas-Oil ® has colorant in it, no need to add color
 Shaded column is recommended dose to try first; we haven't used this product yet

Equivalents:

Fluid ounce = 2 tablespoons

Quart = 0.25 gallon

Fluid ounce = 6 teaspoons

Quart = 0.94 liter

Fluid ounce = 29.57 milliliters

Tablespoon = 3 teaspoons

Gallon = 128 fl. Ounces

Cup = 8 fl. Ounces

Tablespoon = 15 milliliters

Gallon = 3785 milliliters

Cup = 0.5 pint

Tablespoon = 0.5 fl. Ounce

Liter = 2.1 pints

Cup = 236.5 milliliters

Pint = 2 cups

Liter = 1.06 quarts

Cup = 0.25 quart

Pint = 16 f. ounces

Cup = 16 tablespoons

Pint = 473 milliliters

Teaspoon = 5 milliliters

Pint = 0.473 liter

Multiply:

Teaspoon = 0.17 fl. Ounce

Quart = 32 fl. ounces

Liters X 2.113 = pints

Teaspoon = 60 drops

Quart = 2 pints

Pints X 0.4732 = liters

Note: The table for Roundup reflects the % *active ingredient* recommended by many invasive control manuals. The other tables show % of *product solution* suggested on product labels. Where a control manual did list % a.i. for one of these, the table conversion is correct. For example a 20% solution of Garlon4 is 12.5% a.i.