

# Converting Fertilizer Rates for Small Gardens

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How much fertilizer do you need to use in your garden? In your nursery? In your greenhouse? Usually, there is no way of figuring out just what the right amount is for a single potted plant, for a small garden plot, or for a single row. Generally, amounts are recommended in tons or pounds per acre. For small-scale use, the following charts can help you convert pounds of fertilizer required per acre to teaspoons and cups - not normally available as volume measurements.

The small chart on this page tells you how much fertilizer to add to a flowerpot and to a flower box. The full-page chart on the back will help you figure out how much fertilizer to use for a small garden area or a row. Conversions suggested are not exact, but are accurate enough for safe and economical use.

Listed are the weights of fertilizers to apply to areas of 100 and 1,000 square feet. Also listed are the equivalent volumes for various fertilizer materials for 10 square feet, for 100 square feet, and for 10 lineal feet of rows spaced 1, 2, and 3 feet apart. The volume of fertilizer to be applied varies with different materials, even though the weight is the same. For example, 1 pint of ground limestone weighs 23 ounces, while 1 pint of ammonium nitrate weighs approximately 13 ounces.

## To use the chart in back, follow these steps:

1. Find your material.
2. Find the recommended rate per acre.
3. Determine the amount of fertilizer needed for the area to be fertilized.

For example, if your material is ammonium sulfate and the recommended rate is 500 pounds per acre, use 1.2 pounds or 1 pint of fertilizer for a 100-foot area, use 3 tablespoons for 10 feet of row spaced 1 foot apart, or use .6 cup for 10 feet of row spaced 3 feet apart.

To find the volume of a fertilizer not listed, scoop the material loosely into a 1-pint container and weigh carefully. If it weighs 16 ounces, for example, you would use the third block in the chart.

## Equivalents

- 1 acre = 43,560 square feet (a plot about 209 x 209 feet)
- 1 pint of water = 1 pound
- 1 pint = 2 cups, 32 tablespoons, or 96 teaspoons

The rates given here are not intended as recommended rates. Recommendations as to rates of application may be listed on the label of the fertilizer package or may be found in agricultural or gardening bulletins.

## Volume of Average Fertilizer to Use for Flowerpots\* and Flower Boxes

Rate per acre (lb)	4-in pot (tsp)	6-in pot (tsp)	8-in pot (tsp)	1-sq-ft box (tsp)	2-sq-ft box (tsp)
500	.05	.10	.30	1	2
1,000	.10	.20	.60	2	4

\*Because it is difficult to measure this small amount, you can dissolve 1 teaspoon of fertilizer in a pint of water and add appropriate proportion to the flowerpot.

**Follow these three steps to determine how much fertilizer to use**

1. Find your material in the list below	2. Find the recommended rate per acre	3. Determine the amount of fertilizer needed for your specific area						
		Use these weights per acre		Use these volumes per specified area				
		100 sq ft	1,000 sq ft	10 sq ft	100 sq ft	10 feet of row spaced		
Material grouped according to approximate weight per pint	Rate Per acre	(lb)	(lb)	(tbsp)	(pint)	(tbsp)	(tbsp)	(cup)
<b>10 oz per pint, Including:</b>								
Activated sewage sludge	100	0.2	2.3	1.2	0.4	1.2	2.4	0.2
Dried blood	500	1.2	11.5	6.0	1.9	6.0	12.0	1.1
Sulfur	1,000	2.3	23.0	12.0	3.7	*	*	*
<b>13 oz per pint, Including:</b>								
Ammonium chloride	100	0.2	2.3	0.9	0.3	0.9	1.8	0.2
Ammonium nitrate	500	1.2	11.5	4.5	1.4	4.5	9.0	0.8
Urea	1,000	2.3	23.0	9.0	2.8	*	*	*
<b>16 oz per pint, including:</b>								
Ammonium phosphate	100	0.2	2.3	0.7	0.2	0.7	1.4	0.1
Gypsum	500	1.2	11.5	3.5	1.2	3.5	7.0	0.7
Mixed fertilizers	1,000	2.3	23.0	7.0	2.3	*	*	*
Potassium chloride								
<b>19 oz per pint, including:</b>								
Ammonium sulfate	100	0.2	2.3	0.6	0.2	0.6	1.2	0.1
Calcium nitrate	500	1.2	11.5	3.0	1.0	3.0	6.0	0.6
Mixed fertilizers	1,000	2.3	23.0	6.0	2.0	*	*	*
Superphosphate								
<b>23 oz per pint, including:</b>								
Ground limestone	100	0.2	2.3	0.5	0.2	0.5	1.0	0.1
Potassium sulfate	500	1.2	11.5	2.5	0.8	2.5	5.0	0.5
	1,000	2.3	23.0	5.0	1.6	*	*	*
	2,000	4.6	46.0	10.0	3.2	*	*	*

\*Because high rates are not desirable in row fertilization, they have been omitted here.

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