Appendix A. Conversions

Factors
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As discussed in Unit 6 (Calibration), it is often necessary to compute equivalent measures for pesticides that are used in a chemigation application. The following chart will help you in performing quick conversions.

Today, many growers are using chemical proportioners or injectors. Various amounts of dry and liquid pesticides may be used, and many requests are now being received for equivalent measures, volumes, and dilutions. The following table may assist the grower in making such determinations.

**KEEP POSTED FOR READY REFERENCE WHEN NEEDED**

1 teaspoon = 5 cc or ml*
1 tablespoon = 3 teaspoons = 1/4 fluid oz = 1/16 cup = 15 cc or ml*
1 fluid ounce per gallon = 7,490 parts per million
1 ounce = 28.35 grams
1 pound = 16 ounces = 453.6 grams = 0.12 gallons (water)
1 fluid ounce = 2 tablespoons = 29.6 cc or ml
1 cup = 8 fluid oz = 1/2 pint = 16 tablespoons = 48 teaspoons = 236.5 cc or ml
1 pint = 16 fluid oz = 32 tablespoons = 1 lb water = 473 ml
1 quart = 2 pints = 4 cups = 32 fluid oz = 64 tablespoons = 946 ml = 0.946 liters
1 gallon = 4 quarts = 3.785 liters = 8.34 lbs (water) = 0.133 cu ft = 8 pints = 128 fluid oz
1 cubic foot = 0.80357 bushels = 7.48 gallons = 62.4 lbs (water)
1 bushel = 1.25 cubic feet = 2,150.4 cubic inches = 35.24 liters
1 cubic yard = 22 bushels = 27 cubic feet
50 square feet of bench or bed areas x 6 inches deep = 25 cubic feet or 20 bushels
   = a little less than 1 cubic yard
*Usually these will be about 6 and 18 cubic centimeters, respectively, because the surface tension of liquids will not permit a level measurement.

The following equations are useful for chemigation calibration:
450 gallons/minute = 1 acre-inch/hour
27,000 gallons = 1 acre-inch

**Test Plot Conversion Tables**

parts per million (ppm) = 1 milligram/liter
1 percent = 10,000 ppm
   = 1 milligram/kilogram
   = .001 percent
   = .013 ounces in
   100 gal of water

1.1 percent = 1,000 ppm = 1,000 milligrams/liter
1.01 percent = 100 ppm = 100 milligrams/liter
0.001 percent = 10 ppm = 10 milligrams/liter
0.0001 percent = 1 ppm = 1 milligram/liter