

**CONVERSION: U.S. & METRIC MEASURES**

U.S. Units <sup>2</sup>	Metric Equivalents	Conversion Factors Metric to U.S.
<b>Length or Thickness</b>		
1 mile	= 1.6093 kilometers (km)	× 0.6214
1 yard	= 0.9144 meters (m)	× 1.0936
1 foot (ft)	= 0.3048 m	× 3.2808
1 inch	= 2.5400 centimeters (cm)	× 0.3937
1 mil (1/1000 inch)	= 0.0254 millimeters (mm)	× 39.3700
<b>Area</b>		
1 square inch (inch <sup>2</sup> )	= 6.4516 square centimeters (cm <sup>2</sup> )	× 0.1550
1 square yard (yd <sup>2</sup> )	= 0.8361 square meters (m <sup>2</sup> )	× 1.1960
1 acre	= 0.4047 hectares (ha)	× 2.4710
1 section (mile <sup>2</sup> )	= 258.988 ha	× 0.0039
<b>Volume or Capacity</b>		
1 pint	= 0.4732 liters	× 2.1133
1 gallon (gal)	= 3.7853 liters	× 0.2642
1 bushel (bu)	= 35.2381 liters	× 0.0284
1 acre-inch	= 102.7938 cubic meters (m <sup>3</sup> )	× 0.0097
1 Fla. field box (4,800 inch <sup>3</sup> )	= 0.7866 hectoliters (hl)	× 1.2713
1 Fla. citrus carton (4/5 bu)	= 0.2822 hl	× 3.5436
<b>Weight</b>		
1 ounce (oz)	= 28.3495 grams (g)	× 0.0353
1 pound (lb.)	= 0.4536 kilograms (kg)	× 2.2046
1 hundredweight (cwt)	= 45.3592 kg	× 0.0220
1 ton	= 0.9072 metric tonnes	× 1.1022
<b>Rate or Yield</b>		
1 grain/pound (gr/lb.)	= 0.1429 grams/kilogram (g/kg)	× 7.0000
1 pound/acre (lb./acre)	= 1.1208 kilogram/hectare (kg/ha)	× 0.8922
1 ton/acre	= 2.2417 metric tonnes/hectare	× 0.4461
1 gallon/acre (gal/acre)	= 9.346 liters/hectare	× 0.1070
1 Fla. field box/acre	= 1.9437 hectoliters/hectare (hl/ha)	× 0.5162
1 bushel/acre (bu/acre)	= 0.8705 hl/ha	× 1.1488
1 pound/100 gallons (lb./100 gal)	= 1.1983 grams/liter (g/liter)	× 0.8345
1 cubic foot/minute (ft/min)	= 0.4720 liters/second (liters/sec)	× 2.1186
<b>Energy, Light, &amp; Pressure</b>		
1 horsepower (HP)	= 0.7457 kilowatts (kw)	× 1.3410
1 foot candle (ft-cp)	= 10.7639 lux	× 0.0929
1 pound/square inch (psi)	= 70.3069 grams/cm <sup>2</sup>	× 0.0142
1 British Thermal Unit (BTU)	= 0.2530 kilogram calories (kg-cal)	× 3.9526
<b>Temperature</b>		
Fahrenheit = $\frac{(C \times 9)}{5} + 32$	Celsius (Centigrade) = $\frac{(F - 32) \times 5}{9}$	

<sup>2</sup>Note that these are United States measures which often differ from British, e.g., the ton, hundredweight, bushel, gallon, etc.