

**ENGLISH AND METRIC SYSTEM UNITS OF MEASUREMENT  
COMMON EQUIVALENTS AND CONVERSIONS**

**Approximate Common Equivalents**

**Conversions Accurate to Parts Per Million  
(units stated in abbreviated form)**

Approximate Common Equivalents		Conversions Accurate to Parts Per Million (units stated in abbreviated form)	
		Number × Factor	
1 inch	= 25 millimeters	in × 25.4*	= mm
1 foot	= 0.3 meter	ft × 0.3048*	= m
1 yard	= 0.9 meter	yd × 0.9144*	= m
1 mile†	= 1.6 kilometers	mi × 1.60934	= km
1 square inch	= 6.5 square centimeters	in <sup>2</sup> × 6.4516*	= cm <sup>2</sup>
1 square foot	= 0.09 square meter	ft <sup>2</sup> × 0.0929030	= m <sup>2</sup>
1 square yard	= 0.8 square meter	yd <sup>2</sup> × 0.836127	= m <sup>2</sup>
1 acre	= 0.4 hectare	acres × 0.404686	= ha
1 cubic inch	= 16 cubic centimeters	in <sup>3</sup> × 16.3871	= cm <sup>3</sup>
1 cubic foot	= 0.03 cubic meter	ft <sup>3</sup> × 0.0283168	= m <sup>3</sup>
1 cubic yard	= 0.8 cubic meter	yd <sup>3</sup> × 0.764555	= m <sup>3</sup>
1 quart (1q.)	= 1 liter	qt (1q.) × 0.946353	= l
1 gallon	= 0.004 cubic meter	gal × 0.00378541	= m <sup>3</sup>
1 ounce (avdp)	= 28 grams	oz (avdp) × 28.3495	= g
1 pound (avdp)	= 0.45 kilogram	lb (avdp) × 0.453592	= kg
1 horsepower	= 0.75 kilowatt	hp × 0.745700	= kW
1 pound per square inch	= 0.97 kilogram per square centimeter	psi × 0.0703224	= kg/cm <sup>2</sup>
1 millimeter	= 0.04 inch	mm × 0.0393701	= in
1 meter	= 3.3 feet	m × 3.28084	= ft
1 meter	= 1.1 yards	m × 1.09361	= yd
1 kilometer	= 0.6 mile	km × 0.621371	= mi
1 square centimeter	= 0.16 square inch	cm <sup>2</sup> × 0.155000	= in <sup>2</sup>
1 square meter	= 11 square feet	m <sup>2</sup> × 10.7639	= ft <sup>2</sup>
1 square meter	= 1.2 square yards	m <sup>2</sup> × 1.19599	= yd <sup>2</sup>
1 hectare	= 2.5 acres	ha × 2.47105	= acres
1 cubic centimeter	= 0.06 cubic inch	cm <sup>3</sup> × 0.0610237	= in <sup>3</sup>
1 cubic meter	= 35 cubic feet	m <sup>3</sup> × 35.3147	= ft <sup>3</sup>
1 cubic meter	= 1.3 cubic yards	m <sup>3</sup> × 1.30795	= yd <sup>3</sup>
1 liter	= 1 quart (1q.)	l × 1.05669	= qt (1q.)
1 cubic meter	= 250 gallons	m <sup>3</sup> × 264.172	= gal
1 gram	= 0.035 ounces (avdp)	g × 0.0352740	= oz (avdp)
1 kilogram	= 2.2 pounds (avdp)	kg × 2.20462	= lb (avdp)
1 kilowatt	= 1.3 horsepower	kW × 1.34102	= hp
1 kilogram per square centimeter	= 14.2 pounds per square inch	kg/cm <sup>2</sup> × 14.223226	= psi

†nautical mile = 1.852 kilometers

\* exact