Appendix IV Weights and Measures

For assistance on metric usage, call or write:

Elizabeth J. Gentry National Institute of Standards and Technology (NIST) Weights and Measures Division 100 Bureau Drive – Mail Stop 2600 Gaithersburg, MD 20899-2600 Telephone: 301-975-3690 or 4004 FAX: 301-975-8091

E-mail: TheSI@nist.gov

Internet site: <http://ts.nist.gov/WeightsAndMeasures/Metric/mpo_home.cfm>

[Conversions provided in table are approximate]

Symbol	When you know conventional	Multiply by	To find metric	Symbol
in ft yd mi	inches feet yards miles	2.54 30.48 0.91 1.61	centimeters centimeters meters kilometers	cm cm m km
in ² ft ² yd ² mi ²	square inches square feet square yards square miles acre	6.45 0.09 0.84 2.59 0.41	square centimeters square meters square meters square kilometers hectare	cm ² m ² m ² km ² ha
oz lb oz (troy)	ounces ¹ pounds ¹ ounces ²	28.35 0.45 31.10	grams kilograms grams	g kg g
	short tons (2,000 lb) long tons (2,240 lb)	0.91 1.02	metric tons metric tons	t t
fl oz c pt qt gal	fluid ounces cups pints quarts gallons	29.57 0.24 0.47 0.95 3.78	milliliters liters liters liters liters	mL L L L
ft ³ yd ³	cubic feet cubic yards	0.03 0.76	cubic meters cubic meters	m ³ m ³
°F	degrees Fahrenheit (subtract 32)	0.55	degrees Celsius	°C
Symbol	When you know metric	Multiply by	To find conventional	Symbol
cm cm m km	centimeters centimeters meters kilometers	0.39 0.03 1.09 0.62	inches feet yards miles	in ft yd mi
cm ² m ² m ² km ² ha	square centimeters square meters square meters square kilometers hectares	0.15 10.76 1.20 0.39 2.47	square inches square feet square yards square miles acre	in ² ft ² yd ² mi ²
g kg g	grams kilograms grams	0.04 2.21 0.04	ounces ¹ pounds ounces ²	oz lb oz (troy)
t t	metric tons metric tons	1.10 0.98	short tons (2,000 lb) long tons (2,240 lb)	
mL L L L	milliliters liter liters liters liters	0.03 4.23 2.13 1.05 0.26	fluid ounces cups pints (liquid) quarts (liquid) gallons	fl oz c pt qt gal
m ³ m ³	cubic meters cubic meters	35.32 1.32	cubic feet cubic yards	ft ³ yd ³
°C	degrees Celsius (after multiplying, add 32)	1.80	degrees Fahrenheit	°F

¹ For weighing ordinary commodities. ² For weighing precious metals, jewels, etc.

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U.S. Census Bureau, Statistical Abstract of the United States: 2010