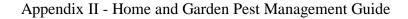
Aids to Calculation & Measurement





Avoid measuring and mixing pesticides by selecting ready-to-use formulations. However, if you need to mix pesticides, home gardeners should purchase a set of metric measuring spoons (1, 2, 5, 15 and 25 mL sizes) for easy measurement of pesticides. Mark these measuring spoons "pesticides" so they are not used for measuring food or household items. Store them with your pesticides. Most Domestic pesticide labels give recommendations in mL for both liquid and dry formulations so you don't have to have an expensive scale to weigh tiny quantities. Another important tool is a metric tape measure so you can measure the area that needs treatment. Accurately measuring and mixing helps avoid overuse of pesticides.

USEFUL MEASUREMENTS – ENGLISH SYSTEM

1 Imperial gallon = 4 quarts = 8 pints = 160 fl.oz. =	1 mile = $5,280$ feet = $1,760$ yards	
10 lbs	1 yard = 3 feet = 36 inches	
of water = approximately 1.2 U.S. gallons		
1 U.S. gallon = .8345 or approximately 5/6	1 foot = 12 inches	
Imperial gallon = 8.3 lbs water	1 acre = approximately 209 X 209 feet = 43,560 sq	
	ft.	
1 Imperial pint = $20 \text{ fl. oz.} = 2.5 \text{ cups} = 570 \text{ mL}$	1 square yard = 9 square feet	
1 U.S. pint = $16 \text{ fl. oz.} = 2 \text{ cups} = 475 \text{ mL}$	1 square foot = 144 square inches	
1 pound (lb.) = 16 ounces	1 cubic foot = 1728 cubic inches	
1 tablespoon = 3 teaspoons = 14 mL	1 cubic yard = 27 cubic feet	
2 tablespoons = 1 fluid ounce = 28 mL	1 rod = 5.5 yards = 16.5 feet	

USEFUL MEASUREMENTS – METRIC SYSTEM

LINEAR MEASURE	CUBIC MEASURE	MASS (WEIGHT) MEASURE	
10 millimetres (mm) = 1	Dry Measure	100 grams = 0.1 kilogram (kg)	
centimetre			
100 centimetres (cm) = 1 metre	1,000,000 cubic cm = 1 cubic	1000 grams = 1 kilogram (kg)	
	metre		
SQUARE MEASURE (AREA)	Liquid Measure	DRY – LIQUID	
		EQUIVALENTS	
$100 \text{cm} \times 100 \text{cm} = 10,000 \text{cm}^2 =$	100 millilitres (mL) = 0.1 litre	1 cubic centimetre $(cm^3) = 1 mL$	
1m^2	(L)		
$100 \text{m x} 100 \text{m} = 10,000 \text{m}^2 =$	1000 milliitres (mL) = 1 litre (L)	1 cubic metre $(m^3) = 1000L$	
1hectare			

PARTS PER MILLION AND WEIGHT/VOLUME EQUIVALENTS

1 percent (%) = 10,000 parts per million (ppm)	1 milligram (mg) /litre (water) = 1 ppm
1 fl. oz./Imperial gallon = 6250 ppm	1 gram (g) /litre (water) = 1000 ppm
1 gallon in 1,000,000 gallons = 1 ppm	1 millilitre (mL) /litre = 1000 ppm
1 litre in 1,000,000 litres = 1 ppm	1 mL / 1000 litres = 1 ppm
1 gram water = 1 millilitre water @ 4°C	1 kilogram water = 1 litre water @ 4°C

METRIC CONVERSION TABLE

When You Know	Multiply	To Find	When You	Multiply By	To Find	
TO TO I	by	****	Know	D' 'I D	****	
To Find	Divide	When You	To Find	Divide By	When You	
т	By	Know		MACCAMEIGHT	Know	
	LENGTH		MASS(WEIGHT)			
inches (in.)	2.5	centimetres	ounces (oz.)	28	grams	
feet (ft.)	30	centimetres	pounds (lb.)	0.45	kilograms	
yards (yd.)	0.9	metres	short tons	0.9	metric tonnes (t)	
miles (mi.)	1.6	kilometres	grams (g)	0.035	ounces	
centimetres (cm)	0.4	inches	kilograms (kg)	2.2	pounds	
metres (m)	1.1	yards	metric tonnes (t)	1.1	short tons	
	AREA			TEMPERATURE		
square inches (sq.in.)	6.5	square cm	Fahrenheit (°F)	- 32 then X 5/9	Celsius (°C)	
square feet (sq.ft.)	0.09	square metres	Celsius (°C)	X 9/5 then + 32	Fahrenheit (°F)	
square yards (sq.yd.)	0.8	square metres	PRESSURE			
acres	0.4	hectares	pounds / sq.in.	6.9	kilopascals(kPa)	
square centimetres	0.16	square inches	pounds / sq.in.	0.069	bars	
square metres (m2)	1.2	square yards				
hectares (ha)	2.5	acres				
V	OLUME		APPLICATIONS			
cubic inches (cu,in,)	16	cubic centimetres	tsp. / Imp. gal.	1	mL or grams / L	
cubic yards (cu.yd.)	0.8	cubic metres	tbsp. / Imp. gal.	3	mL or grams / L	
fluid ounces	28	millilitres (mL)	cups / Imp. gal.	50	mL or grams / L	
Imperial quarts	1.1	litres	oz./gal.	6.2	mL/L	
Imperial gallons	4.54	litres	lb./acre	0.0033	oz. / yd2	
U.S. gallons	3.8	litres	ounces / sq. ft.	305	grams / m2	
			oz./ ft. of row	93	grams / m of row	
			feet / second	0.3	metres / second	