

Weights and Measures

METRIC EQUIVALENTS LINEAR MEASURE

1 centimeter	0.3937 inches
1 inch	2.54 centimeters
1 decimeter	3.937 in. 0.328 foot
1 foot	3.048 decimeters
1 meter	39.37 inches 1.0936 yds.
1 yard	0.9144 meter
1 dekameter	1.9884 rods
1 rod	0.5029 dekameter
1 kilometer	0.621 mile
1 mile	1.609 kilometers

SQUARE MEASURE

1 square centimeter	0.1550 sq. inches
1 square inch	6.452 sq. centimeters
1 square decimeter	0.1076 square foot
1 square foot	9.2903 square dec.
1 square meter	1.196 square yds.
1 square yard	0.8361 square meter
1 acre	160 square rods
1 square rod	0.00625 acre
1 hectare	2.47 acres
1 acre	0.4047 hectare
1 square mile	2.59 sq. kilometers
1 square kilometer	0.386 square mile

MEASURE OF VOLUME

1 cubic centimeter	0.061 cu. inch
1 cubic inch	16.39 cubic cent
1 cubic decimeter	0.0353 cubic foot
1 cubic foot	28.317 cubic dec.
1 cubic meter	1.308 cubic yards
1 cubic yard	0.7646 cubic meter
1 stere	0.2759 cord
1 cord	3.624 steres
1 liter	0.90b qt. dry 1.0567 qts. liq.
1 quart dry	1.101 liters
1 quart liquid	0.9463 liter
1 dekaliter	2.6417 gals. 1.135 pecks
1 gallon	0.3785 dekaliter
1 peck	0.881 dekaliter
1 hektoliter	2.8376 bushels
1 bushel	0.3524 hektoliter

WEIGHTS

1 gram	0.03527 ounce
1 ounce	28.35 grams
1 kilogram	2.2046 pounds
1 pound	0.4536 kilogram
1 metric ton	0.98421 English ton
1 English ton	1.016 metric ton

APPROXIMATE METRIC EQUIVALENTS

1 decimeter	4 inches
1 liter	1.06 quarts liquid, 0.9 qt. dry
1 meter	1.1 yards
1 kilometer	5/8 of a mile
1 hektoliter	2-5/8 bushels
1 hectare	2-1/2 acres
1 kilogram	2-1/5 pounds
1 stere, or cubic meter	1/4 of a cord
1 metric ton	2,204.6 pounds

AVOIRDUPOIS WEIGHT

27-11/32 grams	1 dram
16 drams	1 ounce
16 ounces	1 pound
25 pounds	1 quarter
4 quarters	1 cwt.
2,000 pounds	1 short ton
2,240 pounds	1 long ton

TROY WEIGHT

24 grains	2 pwt.
20 pwt.	1 ounce
12 ounces	1 pound

Used for weighing gold, silver and jewels

CUBIC MEASURE

1,728 cubic inches	1 cubic foot
27 cubic feet	1 cubic yard
128 cubic feet	1 cord (wood)
40 cubic feet	1 ton (shipping)
2,150.42 cubic inches	1 standard bu.
231 cubic inches	1 U.S. standard gal.
1 cubic foot	about 4/5 of a bushel

DRY MEASURE

2 pints	1 quart
8 quarts	1 peck
4 pecks	1 bushel

LIQUID MEASURE

4 gills	1 pint
2 pints	1 quart
4 quarts	1 gallon
31-1/2 gallons	1 barrel

IMPERIAL LIQUID MEASURE

1 U.S. gallon	0.833 Imperial gallon
1 U.S. gallon	3.785 liters
1 Imperial gallon	1,201 U.S. gallons
1 Imperial gallon	4.546 liters
1 liter	0.264 U.S. gallon
1 liter	0.220 Imperial gallon

LONG MEASURE

12 inches	1 foot
3 feet	1 yard
5-1/2 yards	1 rod
40 rods	1 furlong
8 furlongs	1 sta. mile
3 miles	1 league

MARINER'S MEASURE

6 feet	1 fathom
120 fathoms	1 cable length
7-1/3 cable lengths	1 mile
5,280 feet	1 statue mile
6,080.2 feet	1 nautical mile

SQUARE MEASURE

144 sq. inches	1 sq. ft.
9 sq. ft.	1 sq. yard
30-1/4 sq. yards	1 sq. rod
40 sq. rods	1 rood
4 rods	1 acre
640 acres	1 sq. mile

Conversions

In this section, conversion tables are provided to insure the application of proper dosages of turf and ornamental chemicals.

CONVERSION FACTORS

UNITS OF VOLUME, and their abbreviations

- 1 gallon (gal) = 4 quarts = 8 pints = 16 cups
- 1 quart (qt) = 2 pints = 4 cups = 32 fluid ounces
- 1 pint (pt) = 2 cups = 16 fluid ounces = 32 tablespoons
- 1 fluid ounce (fl oz) = 2 tablespoons = 6 teaspoons
- 1 tablespoon (tbsp) = 3 teaspoons (tsp)
- 1 cubic yard (yd³) = 27 cubic feet (ft³)

UNITS OF AREA, and their abbreviations

- 1 square mile (sq mi) = 640 acres
- 1 acre = 4840 square yards = 43,560 square feet
- 1 square yard (sq yd) = 9 square feet
- 1 square foot (sq ft) = 144 square inches

APPLICATION RATES EXPRESSED IN UNITS OF VOLUME TO UNITS OF AREA

- 1 gal/acre = 8 pt/acre = 2.94 fl oz/1000 sq ft
- 1 pt/acre = 16 fl oz/acre = 0.367 fl oz/1000 sq ft = 2 tsp/1000 sq ft
- 1 fl oz/acre = 0.14 tsp/1000 sq ft
- 1 gal/1000 sq ft = 43.56 gal/acre = 8 pt/1000 sq ft = 4 tsp/sq ft
- 1 pt/1000 sq ft = 5.445 gal/acre sq ft
- 1 fl oz/1000 sq ft = 2.722 pt/acre
- 1 pt/sq ft = 125 gal/1000 sq ft

APPLICATION RATES EXPRESSED IN UNITS OF WEIGHT TO UNITS OF AREA

- 1 lb/acre = 0.023 lb/1000 sq ft = 0.367 oz/1000 sq ft
- 1 lb/1000 sq ft = 43.56 lb/acre
- 1 oz/1000 sq ft = 2.722 lbs/acre
- 1 oz/sq ft = 62.5 lb/1000 sq ft

DILUTION RATES EXPRESSED IN UNITS OF VOLUME TO UNITS OF VOLUME

- 1 pt/gal = 2 fl oz/pt = 3/4 tsp/fl oz
- 1 fl oz/gal = 3/4 tsp/pt
- 1 fl oz/pt = 1 cup/gal = 3 tsp/fl oz
- 1 tsp/fl oz = 2 2/3 fl oz/pt

DILUTION RATES EXPRESSED IN UNITS OF WEIGHT TO UNITS OF VOLUME

- 1 lb/gal = 2 oz/pt
- 1 lb/pt = 8 lb/gal = 1 oz/fl oz
- 1 lb/yd³ = .59 oz/ft³
- 1 oz/yd³ = 1.69 lb/ft³ = 1 lb 11 oz/ft³

QUICK CONVERSIONS

Temperature		Length		Volume	
°C	°F	cm	inch	liters	quarts
100	212	2.5	1	1	1.1
90	194	5	2	2	2.1
80	176	10	4	3	3.2
70	158	20	8	4	4.2
60	140	30	12	5	5.3
50	122	40	16	6	6.3
40	104	50	20	7	7.4
35	95	60	24	8	8.5
30	86	70	28	9	9.5
25	77	80	32		
20	68	90	36		
15	59	100	39		
10	50	200	79		
5	41		feet		
0	32	300	10		
-5	23	400	13		
-10	14	500	16		
-15	5	1,000	33		
-20	-4				
-25	-13				
-30	-22				
-40	-40				

CAPACITIES

- Cylinder-diameter²/x depth x 0.785 = cubic feet
- Rectangle-breadth x depth x length = cubic feet
- Cubic Feet x 6.25 = gallons

DRY MEASURES

- 3 Tsp. = 1 Tbsp.
- 16 Tbsp. = 1 Cup
- 2 Cups = 1 Pint
- 2 Pints = 1 Quart
- 8 Quarts = 1 Peck
- 4 Pecks = 1 Bushel

LIQUID MEASURES

- 5 Grams = 1 Tsp.
- 80 Drops = 1 Tsp.
- 3 Tsp. = 1 Tbsp.
- 2 Tbsp. = 1 Fl. Oz.
- 8 Fl. Oz. = 16 Tbsp. = 1 Cup = 1/2 Pint
- 2 Cups = 32 Tbsp. = 1 Pint = 16 Fluid Oz.
- 2 Pints = 1 Quart
- 4 Quarts = 1 Gallon = 128 Fluid Oz.