

LENGTH

1 in = 25.4 mm.
1 mm. = .03937 in.
1 ft. = 30.48 cm.
1 meter = 3.28083 ft.
1 micron = .001 mm.

AREA

1 sq. in. = 6.4516 sq. cm.
1 sq. ft. = 929.03 sq. cm.
1 sq. cm. = 0.155 sq. in.
1 sq. cm. = 0.0010764 sq. ft.

VOLUME

1 cu. in. = 16.387 cu. cm.
1 cu. ft. = 1728 cu. in.
1 cu. ft. = 7.4805 U.S. gal.
1 cu. ft. = 6.229 British gal.
1 cu. ft. = 28.317 liters
1 U.S. gal. = 0.1337 cu. ft.
1 U.S. gal = 231 cu. in.
1 U.S. gal = 3.785 liters
1 British gal. = 1.20094 U.S. gal.
1 British gal. = 277.3 cu. in.
1 British gal. = 4.546 liters
1 liter = 61.023 cu. in.
1 liter = 0.03531 cu. ft.
1 liter = 0.2642 U.S. gal.

WEIGHT

1 ounce av. = 28.35 g.
1 lb. av. = 453.59 g.
1 gram = 0.03527 oz. av.
1 kg. = 2.205 lb. av.
1 cu. ft. of water = 64.425 lb.
1 U.S. gal. of water = 8.33 lb.
1 cu. in. of water = 0.0361 lb.
1 British gal. of water = 10.04 lb.
1 cu. ft. of air at 32° F & 1 atm = 0.080728 lb.

VELOCITY

1 ft. per sec. = 30.48 cm. per sec.
1 cm. per sec. = .032808 ft. per sec.

FLOW

1 cu. ft. per sec. = 448.83 gal. per min.
1 cu. ft. per sec. = 1699.3 liters per min.
1 U.S. gal. per min. = 0.002228 cu. ft. per sec.
1 U.S. gal. per min. = 0.06308 liters per sec.
1 cu. cm. per sec. = 0.0021186 cu. ft. per min.

DENSITY

1 lb. per cu. ft. = 16.018 kg. per cu. meter
1 lb. per cu. ft. = .0005787 lb. per cu. in.
1 kg. per cu. meter = 0.06243 lb. per cu. ft.
1 g. per cu. cm. = 0.03613 lb. per cu. in.

PRESSURE

1 in. of water = 0.03613 lb. per sq. in.
1 in. of water = 0.07355 in. of Hg.
1 ft. of water = 0.4335 lb. per sq. in.
1 ft. of water = 0.88265 in. of Hg.
1 in. of mercury = 0.49116 lb. per sq. in.
1 in. of mercury = 13.596 in. of water
1 in. of mercury = 1.13299 ft. of water
1 atmosphere = 14.696 lb. per sq. in.
1 atmosphere = 760 mm. of Hg.
1 atmosphere = 29.921 in. of Hg.
1 atmosphere = 33.899 ft. of water
1 lb. per sq. in. = 27.70 in. of water
1 lb. per sq. in. = 2.036 in. of Hg.
1 lb. per sq. in. = .0703066 kg. per sq. cm.
1 kg. per sq. cm. = 14.223 lb. per sq. in.
1 dyne per sq. cm. = .0000145 lb. per sq. in.
1 micron = .00001943 lb. per sq. in.

ENERGY

1 B.T.U. = 777.97 ft. lbs
1 erg = 9.4805 x 10⁻¹¹ B.T.U.
1 erg = 7.3756 x 10⁻⁸ ft. lbs.
1 kilowatt hour = 2.655 x 10⁶ ft. lbs.
1 kilowatt hour = 1.3410 h.p. hr.
1 kg. calorie = 3.968 B.T.U.

POWER

1 horsepower = 33,000 ft. lb. per min.
1 horsepower = 550 ft. lb. per sec.
1 horsepower = 2,546.5 B.T.U. per hr.
1 horsepower = 745.7 watts
1 watt = 0.00134 horsepower
1 watt = 44.26 ft. lbs. per min.

TEMPERATURE

Temperature Fahrenheit (°F) = 9/5 Centigrade (°C) + 32 = 9/4 R+32
Temperature Centigrade (°C) = 5/9 Fahrenheit (°F) - 32 = 5/4 R

HEAT TRANSFER

1 B.T.U. per sq. ft. = .2712 g. cal. per sq. cm.
1 g. calorie per sq. cm. = 3.687 B.T.U. per sq. ft.
1 B.T.U. per hr. per sq. ft. per ° F = 4.88 kg. cal. per. hr. per sq. m. per ° C:
1 Kg. cal. per hr. per sq. m. per ° C = .205 B.T.U. per hr. per sq. ft. per ° F:
1 Boiler Horsepower = 33479 B.T.U. per hr.

VISCOSITY

1 Centipoise = .000672 lb. per ft. sec.
1 Centistoke = .00001076 sq. ft. per sec.

If you have any questions, concerns or would like to share something that you have found helpful in your spraying practices e-mail to: pbm@pbmsprayers.com. Spray tips offered by PBM are from our experiences, some are from input we have received from our customers and other spray equipment operators who wish to share successes they have had. We hope these tips help you, but cannot accept liability for any damage to property or individuals should you choose to use them in your spraying practices.