

Useful Reference Conversion Factors

To Convert US Gallons/minute on water to other solutions

1. Find weight or specific gravity of solution in the table below.
2. Multiply desired US gpm or GPA by Conversion Factor.
3. Find calculated US gpm or GPA in flow charts.

Weight of Solution	Specific Gravity	Conversion Factor
7.0 lbs/gallon	0.84	0.92
8.0 lbs/gallon	0.96	0.98
8.34 lbs/gallon (Water)	1.00	1.00
9.0 lbs/gallon	1.08	1.04
10.0 lbs/gallon	1.20	1.10
10.65 lbs/gallon (28% nitrogen)	1.28	1.13
11.0 lbs/gallon	1.32	1.15
12.0 lbs/gallon	1.44	1.20
14.0 lbs/gallon	1.68	1.30

To Convert GPA (on 20" spacing) to other outlet spacing

1. Find desired spacing in table below
2. Multiply GPA in nozzle charts by conversion factor.
3. For other nozzle spacings not listed, divide 20" by desired spacing in inches.

Desired Outlet Spacing (inches)	Conversion Factor
8"	2.50
9"	2.22
10"	2.00
12"	1.67
14"	1.43
15"	1.33
16"	1.25
18"	1.11
19"	1.05
20"	1.00
22"	0.91
24"	0.83
26"	0.77
28"	0.71
30"	0.67
32"	0.63
34"	0.59
36"	0.56
38"	0.53
40"	0.50
50"	0.40
60"	0.33

Unit Conversion Factors

Mile	=	5280 feet (ft)
		1610 meters (m)
US Gallon	=	0.83 Imperial Gallons (imp gal)
		128 fluid ounces (oz)
		4 quarts (qt)
		8 pints (pt)
		3.785 Litres (L)
Imp. Gallon	=	1.2 US Gallons
PSI	=	0.069 Bar
		6.896 Kilopascal (kPa)
US Gallons/Acre	=	9.353 Litres/Hectare (L/ha)
		2.9 oz/1000 square feet
Acre	=	43560 square feet
		4046.7 square meters
		0.405 Hectares
MPH	=	1.609 Kilometers/Hour (km/h)

Other Formulas

Broadcast Per Acre

$$\text{US gallons/minute} = \frac{\text{GPA} \times \text{MPH} \times \text{Nozzle Spacing (inches)}}{5940}$$

$$\text{US gallons/acre} = \frac{5940 \times \text{US gpm per outlet}}{\text{MPH} \times \text{Nozzle Spacing (inches)}}$$

Per 1000 ft²

$$\text{US gallons/minute} = \frac{\text{Gallons/1000 sq ft} \times \text{MPH} \times \text{Nozzle Spacing (inch)}}{136}$$

$$\text{US gallons/1000 ft}^2 = \frac{136 \times \text{GPM/Nozzle}}{\text{MPH} \times \text{Nozzle Spacing (inches)}}$$

Banding

$$\text{US Gallon/minute} = \frac{\text{US GPA} \times \text{MPH} \times \text{Band Width (inches)}}{5940}$$

For questions or other product information, contact Wilger, or visit www.wilger.net