

Dilution Charts/Conversions

Dilution Chart

Dilution Ratio	Ounces Per Gallon
1 to 4	32
1 to 5	26
1 to 10	12
1 to 12	10
1 to 15	8
1 to 20	6
1 to 32	4
1 to 40	3
1 to 50	2½
1 to 60	2
1 to 64	2
1 to 100	1
1 to 128	1
1 to 256	1/2

To Determine

Cost To Use

Divide dilution into cost per gallon

Examples

- 1:256 dilution selling at \$12.30 per gallon
 $\$12.30 \div 256 = .048$ or 4.8¢ per diluted gallon
- 1:10 dilution selling at \$4.00 per gallon
 $\$4.00 \div 11 = .36$ or 36¢ per diluted gallon

Dilution Ratio

Divide ounces per gallon into 128

Example

1½ oz. per gallon dilution
 $128 \div 1.5 = 85$
 Answer = 1:85 dilution ratio

Note

It is necessary to first convert dilution to ounces for **one** gallon.

Example

Dilution given is 10 ounces per 5 gallons.
 Divide 10 by 5 ($10 \div 5 = 2$).
 Answer = two ounces per gallon.
 Now divide the ounces per gallon into 128 ($128 \div 2 = 64$).
 Answer = use dilution is 1:64.

Temperature Conversions

$$^{\circ}\text{F} = 9/5(^{\circ}\text{C}) + 32$$

$$^{\circ}\text{C} = 5/9(^{\circ}\text{F} - 32)$$

U.S. Volume Equivalents:

One Gallon = 4 quarts 8 pints 16 cups 128 ounces	One Quart = 2 pints 4 cups 32 ounces	One Pint = 2 cups 16 ounces
One Cup = 8 ounces	One Ounce = 2 tablespoons 6 teaspoons	One Tablespoon = 3 teaspoons

Ounces Per Gallon:

Divide dilution ratio into 128.

Example

1:85 dilution
 $128 \div 85 = 1.5$
 Answer = 1.5 ounces per gallon

Parts Per Million (P.P.M.) of Active Disinfectant in Various Use-Dilution Ratios:

Multiply percentage of active disinfectant times 10,000, and divide by use-dilution rate.

$$\frac{\% \text{ active} \times 10,000}{\text{dilution rate}}$$

Examples:

- Given active percentage if 4.5%.
- At 1:256 (1/2 oz. per gallon)
 $(4.5 \times 10,000) \div 256 = 176$ ppm active
 - At 1:128 (1 oz. per gallon)
 $(4.5 \times 10,000) \div 128 = 352$ ppm active

Metric Volume Equivalents:

3 teaspoons	= 1 tablespoon	= 15 ml
8 tablespoons	= 1/2 cup	= 118 ml
16 tablespoons	= 1 cup	= 237 ml
1 fluid ounce	= 2 tablespoons	= 30 ml
8 fluid ounces	= 1 cup	= 237 ml
16 fluid ounces	= 2 cups or 1 pint	= 473 ml
32 fluid ounces	= 4 cups or 1 quart	= 946 ml
128 fluid ounces	= 1 gallon	= 3.8 liters