

Dilution Chart

Dilution Ratio	Ounces/Gallon	Percent
1:1	128	50%
1:2	64	33%
1:4	32	20%
1:6	21.3	14.3%
1:8	16	11.1%
1:10	12.8	9.1%
1:12	10.7	7.7%
1:16	8	5.8%
1:20	6.4	4.8%
1:24	5.3	4.0%
1:32	4	3.0%
1:40	3.2	2.4%
1:50	2.5	2.0%
1:64	2	1.5%
1:80	1.6	1.2%
1:96	1.3	1.0%
1:128	1	0.78%
1:170	0.75	0.58%
1:256	0.5	0.39%
1:512	0.25	0.19%

Diluted Cost Per Gallon

Divide dilution into cost per gallon

Example:

(1:128 dilution selling at \$13.40 per gallon)

$\$13.40 \div 128 = 0.1038$ or 10.4 ¢ per diluted gallon

Dilution Ratio

Divide ounces per gallon into 128

Example:

(4 ounces per gallon dilution)

$128 \div 4 = 32$

Answer: 1:32 ratio

Ounces Per Gallon

Divide dilution ratio into 128

Example:

(1:32 dilution)

$128 \div 32 = 4$

Answer: 4 ounces per gallon

Active Parts Per Million

Commonly used for Disinfectants

Step 1: Add all active ingredients together on label

Step 2: Multiply by 10,000

Step 3: Divide the result by the dilution rate

Example:

(Using KennelSol HC 1:256 dilution Quat)

Step 1: $10.14\% + 6.76\% = 16.90\%$ active

Step 2: $10,000 \times 16.9 = 169,000$

Step 3: $169,000 \div 257 = 658$ ppm active Quat

Hard Water Measurements

Hard water contains ions of magnesium and calcium.

1 grain of hard water = 18 ppm hard water

Example:

($450 \div 18 = 25$)

450 ppm hard water = 25 grain