



Technical Note #100

Conversion: ppm to Percent Concentration

It is often helpful to be able to convert a tube's reading from ppm to percent concentration or from percent concentration to ppm.

Key

ppm = parts per million

Equivalents

1% = 10,000 ppm

Helpful Formulas

ppm = % x 10,000
 % = ppm x 0.0001

Example 1

If the gas concentration is measured to be 7.5 percent, what would the measurement be in ppm?

$$7.5 \% \times \frac{10,000 \text{ ppm}}{75,000 \text{ ppm}}$$

OR

$$7.5\% \times \frac{10,000 \text{ ppm}}{1\%} = 75,000 \text{ ppm}$$

Example 2

If the gas concentration is measured to be 25,000 ppm, what would the concentration be in percent?

$$\frac{25,000 \text{ ppm}}{10,000 \text{ ppm}} = 2.5\%$$

OR

$$25,000 \text{ ppm} \times \frac{1\%}{10,000 \text{ ppm}} = 2.5\%$$