



Technical Note #105

Units of Measurement

The following units of measurement and their equivalents are often used in the industries Nextteq serves.

Concentration

Key

mg/m³ = milligram(s) per cubic meter air
 ppm = parts per million
 ppb = parts per billion
 ppt = parts per trillion

Equivalents

1 ppm = mg/kg
 1 ppb = µg/kg
 1 ppt = ng/kg

Exponentials

Key

10², 10³, 10⁶ = superscripts refer to the number of times "10" is multiplied by itself.

Equivalents

10² = 10 x 10 = 100
 10³ = 10 x 10 x 10 = 1000

Length

Key

cm = centimeter(s)
 km = kilometer(s)
 m = meter(s)
 mm = millimeter(s)

Equivalents

100 cm = 1 m
 1 km = 0.6 mile
 1 m = 3.3 ft
 1mm = 1/1000 m, 10-3 m

Temperature

Key

°C = degree(s) Celsius
 °F = degree(s) Fahrenheit

Equivalents

°C = (°F - 32) X 5/9
 °F = (°C x 9/5) + 32

Volume

Key

cc = cubic centimeter(s)
 cm³ = cubic centimeter(s)
 ft³ = cubic foot (feet)
 gal = gallon(s) (US)
 l or L = liter(s)
 m³ = cubic meter(s)
 ml (or mL) = milliliter(s)

Equivalents

1 cc = approximately 1 mL
 1 cm³ = approximately 1 mL
 1 ft³ = 0.0028 m³
 1 gal = 3.8 L
 1 L = 1.05 liquid quarts
 1 m³ = 35 cubic feet
 1 mL = 10-3 L



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Units of Measurement

Weight/Mass

Key

g	=	grams
kg	=	kilograms
lb	=	pound
mg	=	milligrams
Mg	=	megagrams
µg	=	micrograms
mol	=	1 mole of atoms
oz	=	ounce(s)

Equivalents

1 g	=	0.3035 oz
1 kg	=	2.2 lb
1 lb	=	0.45 kg
1 mg	=	1/1000 g / 10 ⁻³ g
1 Mg	=	2205 lb, 106 g
1 µg	=	10 ⁻⁶ g
1 mol	=	6.02 X 10 ²³ atoms
1 oz *	=	28.3 g

*(avoirdupois)