# Conductivity To TDS Conversion Factors

1. **Factor** - the conductivity to ppm TDS conversion factor. Multiply conductivity by this factor to get ppm TDS for the type of TDS reading needed.

2. **442** - a formulation that most closely represents the conductivity to ppm relationship, on average, for naturally occurring fresh water.

### Factor = Actual TDS / Actual Conductivity @ 25 $^o$C.

| Conductivity at 25 $^o$C | TDS KCl | | TDS NaCl | | TDS 442 | |
|---|---|---|---|---|---|---|
| | ppm Value | Factor | ppm Value | Factor | ppm Value | Factor |
| 84 µS | 40.38 | 0.5048 | 38.04 | 0.4755 | 50.50 | 0.6563 |
| 447 µS | 225.6 | 0.5047 | 215.5 | 0.4822 | 300.0 | 0.6712 |
| 1413 µS | 744.7 | 0.5270 | 702.1 | 0.4969 | 1000 | 0.7078 |
| 1500 µS | 757.1 | 0.5047 | 737.1 | 0.4914 | 1050 | 0.7000 |
| 8974 µS | 5101 | 0.5685 | 4487 | 0.5000 | 7608 | 0.8478 |
| 12,880 µS | 7447 | 0.5782 | 7230 | 0.5613 | 11,367 | 0.8825 |
| 15,000 µS | 8759 | 0.5839 | 8532 | 0.5688 | 13,455 | 0.8970 |
| 80 mS | 52,168 | 0.6521 | 48,384 | 0.6048 | 79,688 | 0.9961 |

**Reference :** Eutech Instruments Pte Ltd.