



SMARTCHEM EPA Compliant Methods (Federal Register 12 – Mar-2007)

Analyte	Method	Range*	MDL**
Alkalinity	EPA 310.2	10-200mg/l	1.77 mg/l
Ammonia in Water	EPA 350.1	0.01 – 2.0 mg/l	0.005 mg/l
Chloride	SM 4500-Cl E	1-200 mg/l	0.05 mg/l
Chromium (Hexavalent)	SM 3500-Cr B	0.01 -0.5 mg/l	0.003 mg/l
Cyanide, Total	EPA 335.4 Rev	15-500 µg/l	0.8 µg/l
Hardness	EPA 130.1	10-500 mg/l	7.5 mg/l
Nitrate + Nitrite (by Cd Reduction)	EPA 353.2, Rev 2	0.02-2.0 mg/l	0.0044 mg/l
Nitrate + Nitrite (by Cd Reduction)	SM 4500-NO3-E	0.01-1.00 mg/l	0.0021 mg/l
Nitrate + Nitrite (by Hydrazine)	SM 4500-NO3-H	0.01-10 mg/l	0.002 mg/l
Nitrite	EPA 353.2	0.01-1.0 mg/l	0.0019 mg/l
Nitrite	SM 4500-NO2-B	0.005-0.180 mg/l	0.0004 mg/l
Nitrogen, TKN	EPA 351.2	0.01-1.5 mg/l	0.021 mg/l
Phenol	EPA 420.1	2-500 µg/l	2.9 µg/l
Phosphate, Ortho	SM 4500-P-E	0.005-0.500 mg/l	0.0014 mg/l
Phosphate, Ortho	EPA 365.1, Rev 2	0.01-1.0 mg/l	0.0018 mg/l
Phosphorus, Total (Acid Persulfate Digest)	EPA 365.3	0.01-1.0 mg/l	0.0018 mg/l
Phosphorus, Hydrolyzable	EPA 365.3	0.01-1.0 mg/l	0.0018 mg/l
Phosphorus, Total (Block Digestion)	EPA 365.4	0.01-2.0 mg/l	0.0029 mg/l
Silica, Dissolved in Water	USGS I-2700-85	0.05-20 mg/l	0.0030 mg/l
Sulfate	SM 426C	10-80 mg/l	0.54 mg/l
		0-10 mg/l	0.1 mg/l
Sulfide	SM 4500-S ² -D	2-20 mg/l	1.0 mg/l

*Range may be extended. Contact local Unity Scientific representative for more information

**Method Detection Limit (MDL) is determined by EPA procedure 40 CFR Part 136, App. B