

# FS3700 Automated Chemistry Analyzer Methods List

Segmented Flow Analysis (SFA), Flow Injection Analysis (FIA), injected Segmented Flow Analysis (iSFA), and Segmented Flow Injection Analysis (SFIA)

Analyte	Technique	Method	Operating Range	MDL <sup>1</sup>	Throughput	Channel <sup>2</sup> Part #	Cartridge <sup>3</sup> Part #	Abstract Doc #
<b>Ammonia</b>	SFA, Gas Diffusion	USEPA 350.1	0.01-20.0 ppm 10.0-20,000 ppb	0.001 ppm 1.0 ppb	40 samples per hour	330109	330094	4086-02
<b>Ammonia, Nitrogen</b>	FIA	USEPA 350.1 KCL extracts <sup>4</sup>	0.01-20 ppm ammonia as nitrogen	0.002 ppm	30 samples per hour	330353	330354	4168-01
<b>Chloride</b>	SFA	Standard Methods 4500-CIE	1.0-200 ppm	0.12 ppm	60 samples per hour	330360	330361	4195-01
<b>Cyanide</b> Available (1677)	FIA	OIA-1677-09 SM 4500-CN-Q	0.002-5.00 ppm 2.0-5,000 ppb	0.0005 ppm 0.5 ppb	30 samples per hour	330107	330092	4081-02
<b>Cyanide</b> Available (D6888) (Sulfide abatement)	FIA	ASTM D6888-09 SM 4500-CN-Q	0.005-0.5 ppm 5.0-500 ppb	0.002 ppm 2.0 ppb	30 samples per hour	330106	330091	4083-01
<b>Cyanide</b> Free (D7237)	FIA	ASTM D7237-10 SM 4500-CN-R	2.0-500 ppb	0.5 ppb	30 samples per hour	330355	330356	41631115
<b>Cyanide</b> Free	Photometric Detection	ISO 14403	2.0-500 ppb	0.4 ppb	30 samples per hour	330371	330372	42570116
<b>Cyanide</b> Post-Distillation	FIA, Photometric Detection	USEPA 335.4	5.0-500 ppb	0.5 ppb	30 samples per hour	330351	330352	41611115
<b>Cyanide</b> Total	SFA, UV Digestion	ASTM D7511-09 SM 4500 CN- P	0.003-0.5 ppm 3.0-500 ppb	0.0001 ppm 1.0 ppb	30 samples per hour	330076	330090	4367-01
<b>Cyanide</b> Total	Photometric Detection	ISO 14403	2.0-500 ppb	0.4 ppb	30 samples per hour	330366	330367	42600116
<b>Hexavalent Chromium</b>	FIA	USEPA 600/ 4-79-020	0.01-10 ppm	0.0011 ppm	48 samples per hour	331543	331544	4395-01
<b>MBAS</b>	Continuous Flow	ISO 16265	0.025-2.0 ppm as LAS	0.008 ppm as LAS	24 samples per hour	330357	330358	4259-01

Analyte	Technique	Method	Operating Range	MDL <sup>1</sup>	Throughput	Channel <sup>2</sup> Part #	Cartridge <sup>3</sup> Part #	Abstract Doc #
<b>Nitrate/Nitrite</b>	FIA	USEPA 353.2 KCL extracts <sup>4</sup>	0.01-10.0 ppm 10.0-10,000 ppb	0.001 ppm 1.0 ppb	60 samples per hour	330108	330093	4085-01
	SFA		0.005-10.0 ppm	0.001 ppm	40 samples per hour	331377	331376	
<b>Nitrate/Nitrite in Milk</b>	FIA w/ In-line Dialysis	ISO 14673-3	<b>Nitrate</b> 0.5 mg/L - 5.0 ppm <b>Nitrite</b> 0.025 µg/L - 0.400 µg/L	<b>Nitrate</b> 0.016 ppm <b>Nitrite</b> 0.0016 ppm	30 samples per hour	331534	331535	4389-03
<b>Nitrogen</b> (Total Dissolved)	SFA	USEPA Method 353.2	0.01 - 20 ppm	0.006 mg/L N as NO <sub>3</sub> <sup>-</sup>	20 samples per hour	330954	330955	4178-01
<b>Phenol</b> In-line distillation	SFA	USEPA Method 420.4	1.0-500 ppb	0.5 ppb	22 samples per hour	330363	330364	
<b>Phenol</b> (Post-Distillation)	FIA	USEPA Method 420.4	0.01-2.00 ppm 10.0-2,000 ppb	0.002 ppm 2.0 ppb	90 samples per hour	330110	330083	40740116
<b>Phosphorus</b> (All Forms)	FIA	USEPA Method 365.1	0.01-5.0 ppm 10.0-5,000 ppb	0.001 ppm 1.0 ppb	60 samples per hour	330111	330096	4077-01
<b>Phosphorus</b> All Forms - Low Level	FIA	USEPA Method 365.1	0.001-0.1 ppm 1.0-100 ppb	0.0003 ppm 0.3 ppb	45 samples per hour	330112	330095	40960116
<b>Phosphorus</b> (Total)	FIA w/ In-line UV/Persulfate	Standard Method 4500-P-I	0.010 mg/L - 10 ppm P	0.002 ppm	30 samples per hour	330957	330958	44830218
<b>Silica</b>	SFA	Standard Method 4500-SiO <sub>2</sub> E	0.02 - 20 mg/L SiO <sub>2</sub>	0.02 ppm	60 samples per hour	332386	332387	XA00072
<b>Sulfate</b>	FIA Photometric	USEPA Method 375.2	1.0 ppm - 25 ppm	0.1 ppm	40 samples per hour	331385	331386	43960317
<b>Sulfide</b>	FIA	SM-4500-S2-D	2-5000 ppb	0.2 ppb	50 samples per hour	333175	333176	XA00252
<b>TKN</b> Total Kjeldahl Nitrogen	SFA, Gas Diffusion	USEPA Method 351.2	0.01-20.0 ppm 10.0-20,000 pp	0.001 ppm 1.0 ppb	40 samples per hour	330109	330094	4087-03

<sup>1</sup> Method Detection Limit (MDL) determined in accordance with 40 CFR Part 136 Appendix B      <sup>2</sup> Channels include the cartridge, detector, and valve (if required).

<sup>3</sup> Cartridge part number includes cartridge only. Add CT to part number to get the complete cartridge assembly.

<sup>4</sup> These methods can also be used for determination in potassium chloride (KCl) extracts of soils and plants.



OI Analytical, a Xylem brand  
1725 Brannun Lane  
Yellow Springs, OH 45387

+1.937.767.7241  
xylem-lab@xylem-inc.com  
oico.com

© 2023 Xylem, Inc. 4075-02.0523



[oico.com/fs3700](https://oico.com/fs3700)