

Biodiesel & Ethanol Blend Method Comparison Data

The following comparison data was done by independent laboratories for the Wilks InfraCal Biodiesel Blend Analyzer, the InfraCal Ethanol Blend Analyzer and the InfraSpec VFA-IR Spectrometer. These rugged, portable, easy-to-use analyzers provide measurement data in less than one minute. Ideal for on-site use in laboratories, production facilities or distribution centers.

Comparison of the InfraCal Ethanol Blend Analyzer to an Oxygenate Flame Ionization Detector

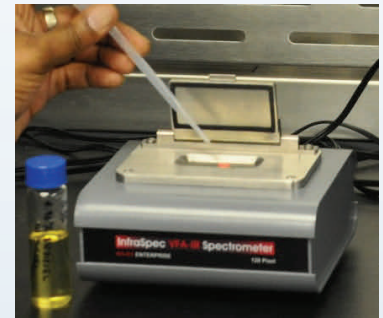
Ethanol O-FID Vol%	InfraCal Ethanol Blend Analyzer
9.87	9.9
9.89	9.8
9.84	9.8
9.97	10.1
9.70	9.5
10.48	10.5



InfraCal 2 Biodiesel Blend Analyzer

Comparison of the InfraCal Biodiesel (FAME) Blend Analyzer and InfraSpec VFA-IR Spectrometer to EN 14078 and ASTM 7371

Sample ID	EN 14078 Nicolet iS10	ASTM D7371 Nicolet iS10	Wilks InfraCal Biodiesel Blend	InfraSpec VFA-IR Spectrometer
1.0 STD	1.1	1.15	1.3	1.4
105-001	0.3	0	0.3	0.25
105-002	0.3	0	0.2	0.17
105-003	0.2	0	0.2	0.22
105-004	0.3	0	0.2	0.2
5.02 STD	5	4.99	5	5.12
30.0 STD	30.2	30.07	30	30.11
50.0 STD	50	50.06	50.4	50.6



InfraSpec VFA-IR Spectrometer

Comparison of the InfraSpec VFA-IR Spectrometer to ASTM D7371

Biodiesel Feedstock	Measured % FAME				
	% FAME in Diesel	Method D7371 lab 1	Method D7371 lab 2	Method D7371 lab 3	InfraSpec VFA-IR Spectrometer
Canola Oil	2.0	1.1	1.8	2.2	2.4
	4.0	3.0, 2.8	3.5, 3.7	4.0, 4.0	4.4, 4.3
	10.0	8.4	9.2	9.7	10.1
	20.0	17.3	19.8	18.0	19.5
Soy Oil	2.0	1.2	2.0	2.1	2.4
	5.0	3.9, 3.8	4.7, 4.8	5.0, 5.0	5.4, 5.4
	10.0	8.5	10.1	9.6	10.2
	18.0	16.3	18.3	16.3	17.8
White Grease	2.0	1.2	2.1	2.2	2.3
	5.0	3.9, 3.8	4.8, 4.8	5.2, 5.2	5.5, 5.4
	12.0	10.5	12.3	10.6	12.4
	20.0	17.6	20.2	18.5	20.5