



Accredited Laboratory

A2LA has accredited

MICROBAC LABORATORIES, INC

Newton, IA

for technical competence in the field of

Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to *joint ISO-ILAC-IAF Communiqué dated April 2017*).



Presented this 8th day of May 2026.

A blue ink signature of Mr. Trace McInturff, written in a cursive style.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7713.01
Valid to May 31, 2028

For the tests to which this accreditation applies, please refer to the laboratory's Chemical Scope of Accreditation.



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

MICROBAC LABORATORIES, INC.
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CHEMICAL

Valid To: May 31, 2028

Certificate Number: 7713.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests using the testing technologies identified below:

<u>Parameter/Analyte(s)</u>	<u>Test Method(s)</u>	<u>Matrix(ces)</u>	<u>Technology</u>
Aldehydes	ISO 22241-2 F	Diesel Exhaust Fluid	Spectrophotometer
Alkalinity	ISO 22241-2 D	Diesel Exhaust Fluid	Titrimetric
Ash	ASTM D482	Diesel/Oil/Bioblends Biodiesel (B-100)	Muffle Furnace
Biodiesel Concentration	ASTM D7371	Diesel/Oil/Bioblends	Fourier Transform Infrared spectroscopy (FTIR)
Biuret	ISO 22241-2 E	Diesel Exhaust Fluid	Spectrophotometer
BTU/Combustion	ASTM D240	Diesel/Oil/Bioblends Biodiesel (B-100)	Bomb Calorimeter
Cetane Index	ASTM D976 ASTM D4737	Diesel/Oil/Bioblends	Calculation
Cold Filter Plugging Point (CFPP)	ASTM D6371	Diesel/Oil/Bioblends Biodiesel (B-100)	CFPP Analyzer
Cloud Point	ASTM D2500	Diesel/Oil/Bioblends Biodiesel (B-100)	Cold Bath
Copper Corrosion	ASTM D130	Diesel/Oil/Bioblends Biodiesel (B-100)	Hot Block
Density	ISO 12185	Diesel Exhaust Fluid	Digital Densitometer
Density/API	ASTM 4052	Diesel/Oil/Bioblends Biodiesel (B-100)	Digital Densitometer
Distillation	ASTM D86	Diesel/Oil/Bioblends	Auto distillation
Flash Point	ASTM D93 ASTM D7094	Diesel/Oil/Bioblends Biodiesel (B-100)	Flash Point Test
High Temp Stability	ASTM D648	Diesel/Oil/Bioblends	Photovolt Reflectance Meter
ICP Metals Al, Ca, Cr, Cu, Fe, K, Mg, Na, Ni, P, and Zn	ISO 22241-2 I	Diesel Exhaust Fluid	Inductively Coupled Plasma (ICP)
Identity	ISO 22241-2 J	Diesel Exhaust Fluid	FTIR

<u>Parameter/Analyte(s)</u>	<u>Test Method(s)</u>	<u>Matrix(ces)</u>	<u>Technology</u>
Oxidation Stability	ASTM D7545	Diesel/Oil/Bioblends	PetroOxy Tester
Particle Count	ASTM D7619 ISO 4406	Diesel/Oil/Bioblends	Laser Counter
Phosphate	ISO 22241-2 H	Diesel Exhaust Fluid	Spectrophotometer
Pour Point	ASTM D97	Diesel/Oil/Bioblends Biodiesel (B-100)	Cold Bath
Refractive Index	ISO 22241-2 C	Diesel Exhaust Fluid	Refractometer
Soluble Matter	ISO 22241-2 G	Diesel Exhaust Fluid	Filtration
Sulfur	ASTM D5453	Diesel/Oil/Bioblends Biodiesel (B-100)	Ultraviolet Fluorescence Spectroscopy
Urea	ISO 22241-2 B ISO 22241-2 C	Diesel Exhaust Fluid	CHN Combustion Analyzer Calculation
Viscosity	ASTM D445	Diesel/Oil/Bioblends Biodiesel (B-100)	Water bath/Glass Viscometer
Visual Inspection	ASTM D4176 ASTM D4176 (Modified)	Diesel/Oil/Bioblends Biodiesel (B-100)	ASTM Bar Chart
Water & Sediment	ASTM D2709	Diesel/Oil/Bioblends Biodiesel (B-100)	Centrifuge
Water by Karl Fischer	ASTM D6304	Diesel/Oil/Bioblends Biodiesel (B-100)	Coulometric Titration

BIOLOGICAL

<u>Parameter/Analyte(s)</u>	<u>Test Method</u>	<u>Matrix(ces)</u>	<u>Technology</u>
Bacteria/Mold & Yeast	ASTM D6469	Diesel/Oil/Bioblends Biodiesel (B-100)	Dipslide

