



# VHG Labs brand Biodiesel standards

The analysis of biodiesel fuels has become an important part of modern petroleum analysis. Biodiesel fuels are made using a percentage of new or recycled feedstock, which include canola, rapeseed, soy, animal fat, and vegetable oils.

Most biodiesel fuels are composed of traditional refined diesel combined with biodiesel fuel. The percentage of biodiesel in the blend is typically 5%, 10%, or 20%, and is labelled B5, B10, or B20 respectively. Biodiesel fuel at 100%, in its original form prior to blending, is thus labelled B100.

The analysis of biodiesel fuels can suffer from matrix interferences, and it is important to use biodiesel based standards to avoid bias. Accordingly, VHG Labs offers a line of standards made in B100 biodiesel specifically for the analysis of metals and sulfur in biodiesel fuel. These standards are made in B100 derived from soybean oil and provide an excellent matrix match for almost all biodiesel fuel analyses.

VHG's biodiesel products are intended for use with ASTM D6751, D5453, D7371, and others.

ASTM Method D6751 and EN 14538 give specifications for the maximum amounts of certain elements that may be present in B100. These elements include Ca, K, Mg, Na, and P, typically analyzed by ICP, and S, which can be analyzed by XRF, ICP, UV Fluorescence or other methods.

VHG Labs' new Biodiesel/Diesel Fuel Blends were developed for the determination of fatty acid methyl esters (FAME) biodiesel content in diesel fuel by infrared (IR) spectroscopy. They are intended for use with ASTM D7371, EN 14078, and other similar methods.

VHG Labs is the only manufacturer of spectrochemical solution standards to use HP-ICP- AES, assuring you a level of quality and confidence in your analysis that's unequaled by any other company in the world.



Description	Product No.
<b>Multi-Element Standards</b>	
For use with ASTM D6751, EN 14107, EN 14108, EN 14109, EN 14214, or EN 14538	
Ca, K, Mg, Na, P @ 5 µg/g, B100 Biodiesel, 100g	VHG-B100M5-5-100G
Ca, K, Mg, Na, P @ 10 µg/g, B100 Biodiesel, 100g	VHG-B100M5-10-100G
Ca, K, Mg, Na, P @ 20 µg/g, B100 Biodiesel, 100g	VHG-B100M5-20-100G
<b>Sulfur Standards</b>	
For use with ASTM D2622, D4294, or D5453	
Sulfur - S @ 5µg/g in B100 Biodiesel, 100mL	VHG-SB100-5-100
Sulfur - S @ 10µg/g in B100 Biodiesel, 100mL	VHG-SB100-10-100
Sulfur - S @ 15µg/g in B100 Biodiesel, 100mL	VHG-SB100-15-100
Sulfur - S @ 20µg/g in B100 Biodiesel, 100mL	VHG-SB100-20-100
Sulfur - S @ 25µg/g in B100 Biodiesel, 100mL	VHG-SB100-25-100
Sulfur - S @ 50µg/g in B100 Biodiesel, 100mL	VHG-SB100-50-100
Sulfur - S @ 100µg/g in B100 Biodiesel, 100mL	VHG-SB100-100-100
Sulfur - S @ 500µg/g in B100 Biodiesel, 100mL	VHG-SB100-500-100
<b>Biodiesel Blanks</b>	
B100 Biodiesel Blank, 100mL	VHG-B100-BLK-100
B100 Biodiesel Blank, 500mL	VHG-B100-BLK-500
<b>Biodiesel/Diesel Fuel Blends</b>	
For use with ASTM D7371 or EN 14078	
100% High Cetane Diesel Fuel, 20mL	VHG-BDBLEND-BLK-20
2% (v/v) Biodiesel / 98% High Cetane Diesel Fuel, 20mL	VHG-BDBLEND-2P-20
5% (v/v) Biodiesel / 95% High Cetane Diesel Fuel, 20mL	VHG-BDBLEND-5P-20
10% (v/v) Biodiesel / 90% High Cetane Diesel Fuel, 20mL	VHG-BDBLEND-10P-20
15% (v/v) Biodiesel / 85% High Cetane Diesel Fuel, 20mL	VHG-BDBLEND-15P-20
20% (v/v) Biodiesel / 80% High Cetane Diesel Fuel, 20mL	VHG-BDBLEND-20P-20
25% (v/v) Biodiesel / 75% High Cetane Diesel Fuel, 20mL	VHG-BDBLEND-25P-20
30% (v/v) Biodiesel / 70% High Cetane Diesel Fuel, 20mL	VHG-BDBLEND-30P-20
100% (v/v) Biodiesel, 20mL	VHG-BDBLEND-100P-20

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