

# Supplementary Information

## UV-Vis Spectrometric Detection of Biodiesel/Diesel Blend Adulterations with Soybean Oil

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Viscosity, refractive index and density were measured for B5 biodiesel/diesel blends adulterated with soybean oil at the levels of 0.0 (i.e. without adulteration), 0.5, 1.0, 1.5, 2.0 and 2.5% v/v (10 samples for each level). Viscosity was measured using a Cannon-Fenske 200 viscosimeter (Vidrolabor). Prior to the viscosity measurements,

the samples were kept at 40°C during 20 minutes in a thermostatic bath (Unique, USC-1800 model). Density was measured using a Densito 30PX densimeter (Mettler Toledo). Refractive index was measured using a 2-way ABBE refractometer (Biobrix). The resulting average values and standard deviations are presented in Table S1.

**Table S1.** Average and standard deviation values of viscosity, density and refractive index of B5 blends adulterated with soybean oil (n = 10 samples for each level of soybean oil)

Soybean oil / % (v/v)	Viscosity / (mm <sup>2</sup> s <sup>-1</sup> )	Density / (g cm <sup>-3</sup> )	Refractive index
0.0	3.01 ± 0.19	0.84 ± 0.00	1.4670 ± 0.0000
0.5	3.06 ± 0.16	0.84 ± 0.00	1.4670 ± 0.0000
1.0	3.11 ± 0.20	0.84 ± 0.00	1.4671 ± 0.0001
1.5	3.04 ± 0.14	0.84 ± 0.00	1.4671 ± 0.0001
2.0	3.45 ± 0.26	0.84 ± 0.00	1.4671 ± 0.0001
2.5	3.28 ± 0.20	0.84 ± 0.00	1.4672 ± 0.0001

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