

Supporting Information

Table S1. Experimental kinematic viscosity data for the biodiesel, diesel and ethanol (mm²/s)

Fuel	Temperature								
	273.15	283.15	288.15	293.15	303.15	313.15	323.15	333.15	343.15
Biodiesel	14.203	10.101	8.6738	7.5275	5.8267	4.6512	3.8087	3.1858	2.7122
Diesel	7.2796	5.3154	4.6217	4.0594	3.216	2.6204	2.1865	1.8606	1.6074
Ethanol	2.5168	2.0252	1.8296	1.658	1.3735	1.1338	0.94775	0.80397	0.68386

Table S2. Experimental density data for the biodiesel-diesel-ethanol blends (g/mL)

Blends	Temperature, K								
	273.15	283.15	288.15	293.15	303.15	313.15	323.15	333.15	343.15
B25D70E5	0.8628	0.8556	0.8519	0.8482	0.8407	0.8331	0.8256	0.8180	0.8102
B20D70E10	0.8580	0.8506	0.8468	0.8431	0.8355	0.8280	0.8203	0.8127	0.8049
B20D75E5	0.8606	0.8533	0.8496	0.8458	0.8384	0.8309	0.8233	0.8158	0.8083
B15D70E15	0.8535	0.8460	0.8422	0.8384	0.8307	0.8229	0.8151	0.8073	0.7992
B15D75E10	0.8558	0.8484	0.8447	0.8409	0.8333	0.8257	0.8180	0.8103	0.8025
B15D80E5	0.8582	0.8509	0.8472	0.8435	0.8360	0.8286	0.8209	0.8133	0.8055
B10D70E20	0.8499	0.8428	0.8390	0.8351	0.8274	0.8195	0.8115	0.8033	0.7960
B10D75E15	0.8515	0.8442	0.8405	0.8367	0.8290	0.8212	0.8135	0.8054	0.7968
B10D80E10	0.8535	0.8461	0.8423	0.8386	0.8310	0.8235	0.8156	0.8077	0.7989
B10D85E5	0.8561	0.8488	0.8450	0.8413	0.8338	0.8264	0.8188	0.8112	0.8034
B5D70E25	0.8480	0.8412	0.8374	0.8336	0.8257	0.8177	0.8095	0.8007	0.7937
B5D75E20	0.8487	0.8414	0.8376	0.8338	0.8261	0.8184	0.8106	0.8026	0.7945
B5D80E15	0.8496	0.8424	0.8387	0.8348	0.8271	0.8195	0.8115	0.8036	0.7943
B5D85E10	0.8512	0.8438	0.8401	0.8362	0.8286	0.8210	0.8132	0.8054	0.7969
B5D90E5	0.8552	0.8474	0.8437	0.8400	0.8320	0.8246	0.8170	0.8093	0.8015