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MEASURED PHYSICAL CHEMICAL PROPERTIES OF MODEL COMPONENTS

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The energy crisis in the world has sparked the interest in biodiesel and Fischer- Tropsch fuels. Alternate fuels are being produced and used all over the world in different climatic conditions. Thus, making it important to ascertain their quality. Fuel quality surveillance has been traditionally performed through a series of chemical and physical property measurements. The data that is currently being used as a reference for the industry is sought from the CRC published in 1983. Over the years the sources of fuels and their components have changed and require a new reference.

This study is focused on measuring the physical properties of chemicals ranging with carbon number ranging 10 to 18. The physical properties chosen for the study included dielectric constant, bulk modulus and viscosity. The thermal properties selected included specific heat and thermal conductivity.