Depression Effect of Cold Filter Plugging Point of Palm Biodiesels in Petrodiesel Fuel Blended

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Abstract.

Palm methyl esters meet most of the strict quality specifications that ensure smooth performance, except cold flow property, which are inferior. The cold flow property of biodiesel and all diesel fuels, which is critical in cold weather, is usually evaluated by cold filter plugging point (CFPP) in European and Asia countries. In this study, we showed a depression effect of the CFPP for six kinds of palm biodiesels in two Taiwanese petrodiesel fuels blended at B2–B17. Even though the palm biodiesels have a CFPP over the limit defined for Taiwanese B100 by the standard CNS 15072 or EN 14214, the palm biodiesel blends exhibited a better and satisfactory CFPP of the petrodiesel blends that meet the diesel standard CNS 1471 (similar to EN 590).