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**POSTER**

**EVALUATION OF A MODIFIED EN 14112 (RANCIMAT TEST) FOR ASSESSING  
OXIDATION STABILITY OF BIODIESEL BLENDS**

Steven R. Westbrook

Southwest Research Institute, P.O. Drawer 28510, San Antonio, TX 78228-0510 USA

Standard Test Method EN 14112, more commonly known as the Rancimat, is the most widely used and accepted test for the oxidation stability of biodiesel (B100). This test method is also being suggested as a means to evaluate the oxidation stability of biodiesel/petroleum diesel blends. Unfortunately, the standard Rancimat test is not well suited for this application and is prone to producing misleading results. Under the standard test conditions, some of the petroleum fraction can begin to distill. The petroleum vapors can create materials incompatibility problems with some of the test equipment (i.e. plastics and elastomers). The petroleum can also interfere with the conductivity measurements taken by the instrument.

The instrument manufacturer has developed test modifications to address these incompatibilities and make the test applicable to blends. This paper presents the results of many Rancimat tests of biodiesel/petroleum diesel blends. The blends were tested using both the standard test method and the revised method. Tests were conducted on two separate instruments. Many of the blends were also tested by other stability tests and the results are compared as a measure of the test method correlations.

