



PAC's AC Analytical Controls® FAME in AVTUR Analyzer Complies with IP 599 Method

New Method Determines FAME in Aviation Turbine Fuel by Gas Chromatography

PAC, a leading global provider of advanced analytical instruments for laboratories and online process applications, pioneered the IP 599 method, "Determination of Fatty Acid Methyl Esters (FAME) in aviation turbine fuel - Gas Chromatography using heart-cut and refocusing", that was recently approved and published by the Energy Institute (EI). As part of the approval process, EI conducted an in-depth interlaboratory study that included 8 laboratories from Europe and Canada analyzing the samples via this method. The precision, as calculated by the Energy Institute, exceeds the known statements for competing technologies such as IP 583 (IR), IP 585 (GC-MS) and IP 590 (HPLC) methods.

PAC developed this new method after its AC FAME in AVTUR analyzer, a unique gas chromatography analyzer combining deans-switching and re-focusing. It provides accurate quantitative data on individual and Total FAME components in the range of C16 to C18 with the option to analyze C14 FAME which is a marker for the presence of lower chain methyl esters such as those produced from coconut oil. This innovative method is specified for the range of approximately 3.5 to 116 mg/kg FAME; this is sufficient to meet the 5 mg/kg lower limit defined in DEF STAN 91-91 and ASTM D1655.

"In addition to higher precision and analyzing a wide range of jet fuels, this new method utilized by the AC FAME in AVTUR instrument is the easiest one to perform due to no sample preparation or complex multi component calibrations," says David Tran, Vice-President of PAC Product Management and Marketing. "Due to its ease of use, a highly educated chemist is no longer required to run this analysis. It can now be used for routine analysis by refineries, distribution and pipeline companies, independent labs, airline companies, or military for the measurement of FAME (biodiesel) in jet fuel."

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PAC is a leading global provider of advanced analytical instruments for laboratories and online process applications in industries such as refinery, petrochemical, biofuels, environmental, food & beverage, and pharmaceutical. To provide its customers with cutting edge technology, PAC leverages significant R&D resources to support its core technologies, including chromatography, elemental analysis, physical properties, and fuels composition. PAC's product portfolio includes leading product lines with long histories of developing innovative instrumentation: AC Analytical Controls, Advanced Sensors, Antek, Alcor, Cambridge Viscosity, PetroSpec, PSPI, ISL and Walter Herzog. For more information, visit www.pacpl.com, or contact the company's headquarters at 8824 Fallbrook Dr., Houston, Texas 77064, Tel. (U.S.) 800.444.TEST, or 281.940.1803.