‘Quality Check’ of Test Methods for Oxidation Stability

As part of the analytics of Diesel fuels, test methods to determine the oxidation stability are very common. Biodiesel analytics mainly use the so-called ‘Rancimat’ methods EN 14112 and EN 15751, the latter of which is also used for blend fuels.

A significant weak point of those test methods is calibration; although individual parameters like heating block temperature and air flow can be adjusted and calibrated separately, for lack of suitable reference material a check of the system as a whole is not possible so far. Due to their aging, the use of round robin test samples – as practiced otherwise – is only suitable to a limited extent and unsafe.

With the quality check material presented here, testing equipment can be checked for the first time for its reliability and correct performance when determining the oxidation stability by means of a control sample. Equipment errors and systematic mistakes during operation can be identified fast and reliably. Furthermore, that way outlying test results can easily be accepted or ruled out as right or wrong.

For round robin tests the control material is validated by qualified laboratories. Each shipment contains a certificate of analysis for the delivered batch. Careful production and optimum storage at constant conditions guarantee a high stability of the test fluid which is supplied in vials containing a quantity sufficient for two measurements. Thus it is assured that the remaining shipment stays stable. If stored at room temperature and excluding light the control material’s quality does not deteriorate for six months.
Technical Information
Control fluid for test methods to determine the oxidation stability
Composition: Fatty Acid Methyl Ester (FAM) according to EN 14214
Storage life/stability: 6 months (min.)

Range of Application
Check of the following test methods:

- EN 14112 – Fat and oil derivatives – Fatty Acid Methyl Ester (FAME) – Determination of oxidation stability (accelerated oxidation test)

- EN 15751 (DIN 51627-2) – Automotive fuels – Fatty Acid Methyl Ester (FAME) fuel and blends with Diesel fuel – determination of the oxidation stability by accelerated oxidation test

How to Order
Pricelist
1 Set of 5 vials of 10 ml each  150.00 € (plus VAT)
Shipping fees within Germany  25.00 €
Shipping fees within Europe  50.00 €
Shipping fees overseas   on request

Please place your order with
Arbeitsgemeinschaft Qualitaetsmanagement Biodiesel e.V.
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E-mail:  info@agqm-biodiesel.de

Shipment will be effected on receipt of payment.