



Quality Check Material (QC Material)
For Safe Laboratory Results

Reliable measuring results are a prerequisite for the safe production and quality management of biodiesel or pharmaceutical glycerol. For that purpose regular checks of all methods used in the laboratory are indispensable. Apart from calibration the use of QC material has proven to be an effective measure in every-day laboratory practice.

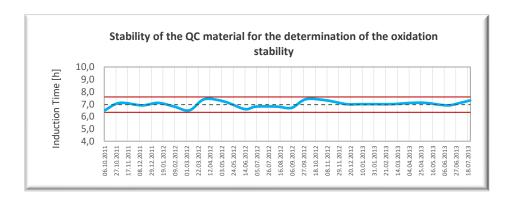
Jointly with Analytik-Service Gesellschaft mbH (ASG), Association Quality Management Biodiesel (AGQM) offers QC materials for the monitoring of test methods and equipment used for a number of parameters of DIN EN 14214 or the European Pharmacopeia. In Round Robin tests those QC materials were specified by qualified laboratories and they can thus be considered well referenced material the use of which provides many advantages:

- Additional check of own measuring precision by external check material
- Identification of handling, device or systematic mistakes or errors
- Regular control of measuring devices and documentation
- Simple handling the QC material is handled just like any regular sample
- High reliability of the QC materials by Round Robin Test safeguarding/backup

We offer four different QC materials which are easy to handle and ready to use:

QC Material MR (Multi-Reference)
QC Material OS (Oxidation Stability)
QC Material MeOH (Methanol Content)
QC Material PhGly (Pharmaceutical Glycerol)

The fact that by its use a multitude of parameters of DIN EN 14214 can be checked makes QC material MR a special implement. Every delivery is accompanied by a batch-related Certificate of Analysis (CoA). The QC materials OS and MeOH are provided in vials, each vial containing enough sample for two measurements. Thus, the rest of the delivery stays stable. By means of QC material PhGly certain methods of the European Pharmacopeia (PhEur) and some additional methods can be checked. Careful manufacture and optimum storage conditions guarantee for high stability as can be seen from the following graph using the example of QC material OS.







# **Ordering Information**

### **Quality Check Material MR**

Sales Unit: 1 screw cap bottle, aluminium, 100 ml Price: € 100.00 plus VAT (if applicable)

# **Quality Check Material OS**

Sales Unit: 1 set of 5 vials, 10 ml each
Price: € 170.00 plus VAT (if applicable)

# **Quality Check Material MeOH**

Sales Unit: 1 set of 5 vials, 8 ml each

Price: € 170.00 plus VAT (if applicable)

# **Quality Check Material PhGly**

Sales Unit: 1 screw cap bottle, aluminium, 100 ml Price: € 100.00 plus VAT (if applicable)

# **Delivery Charges**

Delivery charges (Germany) € 40.00 plus VAT (if applicable)
Delivery charges (Europe) € 60.00 plus VAT (if applicable)
Delivery charges (abroad) € 105.00 plus VAT (if applicable)

# **Technical Information**

# **Composition:**

Fatty Acid Methyl Ester (FAME) or Pharmaceutical Glycerol

### Shelf life/Durability:

Minimum 6 months







#### Scope of Application – Quality Check Material MR

EN 116: Diesel and domestic heating fuels - Determination of cold filter plugging point

**EN 14103:** Fat and oil derivatives - Fatty Acid Methyl Esters (FAME) - Determination of ester and linolenic acid methyl ester contents

**EN 14105:** Fat and oil derivatives - Fatty Acid Methyl Esters (FAME) - Determination of free and total glycerol and mono-, di-, triglyceride contents

**EN 14107:** Fat and oil derivatives - Fatty acid methylesters (FAME) - Determination of phosphorus content by inductively coupled plasma (ICP) emission spectrometry

EN 14111: Fat and oil derivatives - Fatty acid methylesters (FAME) - Determination of iodine value

**EN 14538:** Fat and oil derivatives - Fatty acid methyl ester (FAME) - Determination of Ca, K, Mg and Na content by optical emission spectral analysis with inductively coupled plasma (ICP OES)

**EN 15779:** Petroleum products and fat and oil derivates - Fatty acid methyl esters (FAME) for diesel engines - Determination of polyunsaturated (>= 4 double bonds) fatty acid methyl esters (PUFA) by gas chromatography

**EN 16300**: Automotive fuels - Determination of iodine value in fatty acid methyl esters (FAME) - Calculation method from gas chromatographic data

EN 23015: Petroleum products; determination of cloud point

**EN ISO 3675**: Crude petroleum and liquid petroleum products - Laboratory determination of density - Hydrometer method

**EN ISO 12185:** Crude petroleum and petroleum products - Determination of density - Oscillating U-tube method

**EN ISO 20846:** Petroleum products - Determination of sulfur content of automotive fuels - Ultraviolet fluorescence method

**EN ISO 20884**: Petroleum products - Determination of sulfur content of automotive fuels - Wavelength-dispersive X-ray fluorescence spectrometry

### **Scope of Application – Quality Check Material OS**

**EN 14112**: Fat and oil derivatives - Fatty acid methylesters (FAME) - Determination of oxidation stability (accelerated oxidation test)

**EN 15751:** Automotive fuels - Fatty acid methyl ester (FAME) fuel and blends with diesel fuel - Determination of oxidation stability by accelerated oxidation method

# Scope of Application – Quality Check Material MeOH

EN 14110: Fat and oil derivatives - Fatty acid methylesters (FAME) - Determination of methanol content





<u>Scope of Application – Quality-Check Material PhGly:</u>

PhEur 9.2 / 0496: Glycerol Content

PhEur 9.2 / 0496: Ester Content

PhEur 9.2 / 2.5.12: Water Content

PhEur 9.2 / 2.2.6: Refractive Index n<sup>20</sup><sub>D</sub>

EN ISO 12185: Crude petroleum and petroleum products - Determination of density - Oscillating U-tube

method

EN ISO 6271-2: Clear liquids - Estimation of colour by the platinum-cobalt colour scale