



Biodiesel Photometer DP 800

The device for the determination of triglycerides and glycerol in the course of the production of biodiesel

The Biodiesel photometer allows a quick on-the-spot determination of **triglycerides** and **glycerol**, thereby contributing to the regulation, optimisation and quality assurance of the production processes of biodiesel. The parameters may be determined directly and without any sample preparation by means of an ordinary photometric measurement.

With the triglyceride value of a sample that has been removed at process beginning it may be evaluated, for instance, whether the applied catalyst quantity is sufficient or needs to be increased in order to accelerate the ester interchange reaction. In contrast, a sample that is removed at a later time provides the information whether the ester interchange process has already finished (triglycerides < 0.2%) or needs to be continued.

The value indicated in Ma% is measured mathematically using a calibration function and contains only the triglyceride content. The result does not contain the parts of the co-determined mono- and diglycerides as they are already eliminated.

The portable laboratory biodiesel allows:

- Recognition of the level of the ester interchange on location and within 2 minutes
- Process optimisation by contemporary detection of the reaction progress
- Identification of the ester interchange's process end: triglyceride content < 0.2 Ma%
- Quality control regarding the triglyceride content directly from biodiesel and without sample preparation
- Content analysis of glycerol, similar to triglyceride determination

The portable laboratory biodiesel is characterised by:

- High accuracy of measurement results
- Photometric measuring principle
- Ready-to-use reagent, filled in round cuvettes
- Direct sample addition, therefore no complex sample preparation
- Operational readiness immediately after activation
- Calibration not necessary

The portable, light measuring system with optional mains or battery operation allows a simultaneous observation of several equipments.

Biodiesel Photometer

- Size: 19.5 x 10.0 x 4.5 cm
- Weight: 0.4 kg
- Wavelength: 520nm
- Data printout via RS 232C interface by Diaglobal printer DZ 008
- Mains or battery (9V)-operated
- Photometric inaccuracy < 0,5 % at E = 1.000

5 µL capillaries

- 1-5 µL ring marks

Ready-to-use tests

- TRI 742 Triglycerides
- GLY 742 Glycerine

Carrying case optional

Size: 45 x 36 x 14 cm
 Weight: 2.8 kg
 Contents: photometer, power unit, accumulator, 5 µL capillaries, micropipettor, cuvette rack, disposable bag, writing utensils

Accessories box

for diluting of Biodiesel



Complies with the requirements of Directive 98/79/EC, Annex I and the standards EN ISO 9001, EN ISO 13485, EN ISO 14971, EN 13640 and EN 61010