

# Biodiesel

**Date of sampling: 24.05.2017**

**Samples taken by: independent inspectors**

| TEST                        | UNIT               | METHOD           | RESULT |
|-----------------------------|--------------------|------------------|--------|
| Acid value                  | mg KOH/g           | EN 14104         | 0.01   |
| Ash                         | % m/m              | ISO 3987         | < 0.01 |
| Cetane number               | -                  | EN ISO 5165      | 57.5   |
| Cloud point                 | °C                 | IP 444           | 4.0    |
| Cold filter plugging point  | °C                 | BS EN 116        | 2      |
| Copper corrosion            | Class              | EN ISO 2160      | 1a     |
| Density at 15°C             | kg/m <sup>3</sup>  | EN ISO 12185     | 881.3  |
| Ester content               | % m/m              | EN 14103         | 97.3   |
| Flash point                 | °C                 | ISO 2719         | 167    |
| Iodine value                | gl/100g            | EN 14111         | 91     |
| Viscosity at 40°C           | mm <sup>2</sup> /s | EN ISO 3104      | 4.65   |
| Sodium & potassium content  | mg/kg              | EN 14108 & 14109 | 1      |
| Calcium & magnesium content | mg/kg              | EN 14538         | 0.1    |
| Phosphorous                 | mg/kg              | EN 14107         | 0.7    |
| Methanol content            | % m/m              | EN 14110         | 0.01   |
| Monoglyceride content       | % m/m              | EN 14105         | 0.3    |
| Diglyceride content         | % m/m              | EN 14105         | 0.14   |
| Triglyceride content        | % m/m              | EN 14105         | 0.04   |
| Free glycerol               | % m/m              | EN 14106         | 0.002  |
| Total glycerol              | % m/m              | EN 14105         | 0.12   |
| Oxidation stability 110°C   | hrs                | EN 14112         | 9      |
| Sulphur content             | mg/kg              | BS EN ISO 20846  | 10     |
| Water content               | mg/kg              | EN ISO 12937     | 175    |