

Léman Bio Energie
Route de Pallatex 1
1163 Etoy
SWITZERLAND

Your reference : -
Your order no. : QM Biodiesel CH
Date of order : 19.03.2018
Sample Receipt : 20.03.2018
Sender : Dr. Radig
Start of test period : 20.03.2018
End of test period : 23.03.2018
Report date : 23.03.2018
Page : 1 of 1

Report No. : 2602151-1

Sample : XIV A BEL II, Biodiesel Monitoring CH 2018-1 / 17/03/2018
Appearance : Color yellowish, clear, no visible impurities and water
Container : PE/PP canister 1000 ml
ASG-ID : 2602151_001

Seal No. : -

| Parameter | Method | Result | Specification DIN EN 14214:2014-06 | | Unit |
|-------------------------------|-------------------|-----------|------------------------------------|------|--------------------|
| | | | min. | max. | |
| Ester content | DIN EN 14103:2015 | 96,8 | 96,5 | - | % (m/m) |
| Density [15 °C] | DIN EN ISO 12185 | 883,5 | 860 | 900 | kg/m ³ |
| Kin. viscosity [40 °C] | DIN EN ISO 3104 | 4,723 | 3,50 | 5,00 | mm ² /s |
| Flash point | DIN EN ISO 2719 | 165,5 | 101 | - | °C |
| CFPP | DIN EN 116 | -9 | - | * | °C |
| Sulfur content | DIN EN ISO 20884 | <5 [1,8] | - | 10 | mg/kg |
| Cetane Number (DCN) | DIN EN 15195 | 59,8 | 51,0 | - | - |
| Sulfated ash [775 °C] | ISO 3987 | <0,001 | - | 0,02 | % (m/m) |
| Water content | DIN EN ISO 12937 | 221 | - | 500 | mg/kg |
| Total contamination | DIN EN 12662:1998 | 3 | - | 24 | mg/kg |
| Copper strip corrosion | DIN EN ISO 2160 | 1 | - | 1 | Corr.° |
| Oxidation stability | DIN EN 14112 | 5,9/5,5** | 8,0 | - | h |
| Acid value | DIN EN 14104 | 0,073 | - | 0,50 | mg KOH/g |
| Iodine value | DIN EN 16300 | 95,1 | - | 120 | g Iodine/100g |
| Linolenic acid content | DIN EN 14103:2015 | 1,2 | - | 12,0 | % (m/m) |
| Polyunsaturated Methyl Esters | DIN EN 15779/A1 | <0,6 | - | 1,00 | % (m/m) |
| Methanol content | DIN EN 14110 | 0,01 | - | 0,20 | % (m/m) |
| Free glycerol content | DIN EN 14105:2011 | 0,001 | - | 0,02 | % (m/m) |
| Monoglyceride content | | 0,03 | - | 0,70 | % (m/m) |
| Diglyceride content | | 0,06 | - | 0,20 | % (m/m) |
| Triglyceride content | | <0,01 | - | 0,20 | % (m/m) |
| Total glycerol content | | 0,017 | - | 0,25 | % (m/m) |
| Phosphorous content | DIN EN 14107 | <4 (<0,5) | - | 4,0 | mg/kg |
| Alkali content (Na+K) | DIN EN 14538 | <1 | - | 5,0 | mg/kg |
| Metal Content II (Ca+Mg) | | <1 | - | 5,0 | mg/kg |
| Cloud point | DIN EN 23015 | +4 | - | * | °C |

* acc. national specifications

**result of 2nd analysis



Jürgen Bernath (Technical manager)

This report is related only to the samples stated above and may not be reproduced except in full, without approval of the testing laboratory. Storage of the samples: 4 weeks from report date
For further information, please refer to our terms and conditions at www.asg-analytik.de Accreditation acc. to DIN EN ISO/IEC 17025.

