



## Certificate of Composition

### Biodiesel D6584 Kit

**Agilent Part Number: 5190-1408**

**Sample Lot Number: 0006510262**

**This is a calibration kit for ASTM Method D6584. This kit contains five individual calibration solutions and two internal standard solutions.**

#### Neat Material

#### Purity and/or Grade

|                                   |                 |
|-----------------------------------|-----------------|
| 1,3-Diolein (CAS NO.: 2465-32-9)  | 98.0%           |
| Glycerol (CAS NO.: 56-81-5)       | 100.0%          |
| Monoolein (CAS NO.: 111-03-5)     | 100.0%          |
| Triolein (CAS NO.: 122-32-7)      | 99.0%           |
| Butanetriol (CAS NO.: 42890-76-6) | 99.7%           |
| Tricaprin (CAS NO.: 621-71-6)     | 100%            |
| Pyridine (CAS NO.: 110-86-1)      | 99.9% Anhydrous |

#### Solutions

##### 1. ASTM D6584 Standard Solution 1, 1 x 1ml

**Lot No. 0006508457**

###### Neat Material

###### Concentration

|             |             |
|-------------|-------------|
| 1,3-Diolein | 50.2 µg/ml  |
| Glycerol    | 5.01 µg/ml  |
| Monoolein   | 100.4 µg/ml |
| Triolein    | 50.2 µg/ml  |

**Solvent:** Pyridine

##### 2. ASTM D6584 Standard Solution 2, 1 x 1ml

**Lot No. 0006508458**

###### Neat Material

###### Concentration

|             |             |
|-------------|-------------|
| 1,3-Diolein | 100.4 µg/ml |
| Glycerol    | 15.0 µg/ml  |
| Monoolein   | 251.0 µg/ml |
| Triolein    | 100.4 µg/ml |

**Solvent:** Pyridine

**3. ASTM D6584 Standard Solution 3, 1 x 1ml**

**Neat Material**

1,3-Diolein

Glycerol

Monoolein

Triolein

**Solvent:** Pyridine

**Lot No. 0006508459**

**Concentration**

200.9 µg/ml

25.0 µg/ml

501.9 µg/ml

200.8 µg/ml

**4. ASTM D6584 Standard Solution 4, 1 x 1ml**

**Neat Material**

1,3-Diolein

Glycerol

Monoolein

Triolein

**Solvent:** Pyridine

**Lot No. 0006508460**

**Concentration**

351.5 µg/ml

35.1 µg/ml

752.9 µg/ml

351.4 µg/ml

**5. ASTM D6584 Standard Solution 5, 1 x 1ml**

**Neat Material**

1,3-Diolein

Glycerol

Monoolein

Triolein

**Solvent:** Pyridine

**Lot No. 0006508461**

**Concentration**

502.2 µg/ml

50.1 µg/ml

1004 µg/ml

501.9 µg/ml

**6. Butanetriol Internal Standard #1, 1 x 5ml**

**Neat Material**

Butanetriol

**Solvent:** Pyridine

**Lot No. 0006508462**

**Concentration**

1003 µg/ml

**7. Tricaprin Internal Standard #2, 1 x 5ml**

**Neat Material**

Tricaprin

**Solvent:** Pyridine

**Lot No. 0006508463**

**Concentration**

8014 µg/ml

**Traceability:**

These standards have been produced gravimetrically using ISO9001 quality procedures. NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is µg/ml +/- 0.5%, uncertainty based upon balance and Class A volumetric glassware.

**Storage Temperature: Store Refrigerated (2° - 8°C)**

**Date of Manufacture: 13 December 2019**

**Date of Expiration: 31 July 2021**

  
Monica Bourgeois  
QMS Representative