



Agilent Technologies



## Certificate of Analysis

EN12916:2006, IP391/07 System Calibration Standards 1 and 2 (SCS1 and SCS2)

### Aromatic Hydrocarbon Test Method for Diesel and Petro/Biodiesel Analysis

Agilent Part  
Number: 5190-0485

Kit Lot  
Number: N80501

This Certified Reference Material (CRM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The certified value and uncertainty value for each analyte was determined gravimetrically.

| Vial        | Lot #    | Analyte            | CAS#        | Purity* | Certified Value |       |
|-------------|----------|--------------------|-------------|---------|-----------------|-------|
| 5190-0485-1 | N80501-1 | cyclohexane        | 000110-82-7 | 99+%    | 10.0 ± 0.1      | mg/mL |
|             |          | 1-phenyldodecane   | 000123-01-3 | 98+%    | 1.00 ± 0.01     | mg/mL |
|             |          | o-xylene           | 000095-47-6 | 98+%    | 5.02 ± 0.03     | mg/mL |
|             |          | hexamethylbenzene  | 000087-85-4 | 98+%    | 1.00 ± 0.01     | mg/mL |
|             |          | naphthalene        | 000091-20-3 | 98+%    | 1.00 ± 0.01     | mg/mL |
|             |          | dibenzothiophene   | 000132-65-0 | 98+%    | 0.502 ± 0.003   | mg/mL |
|             |          | 9-methylanthracene | 000779-02-2 | 98+%    | 0.502 ± 0.003   | mg/mL |
| 5190-0485-2 | N80501-2 | hexadecanoic acid  | 000112-39-0 | 98+%    | 804 ± 4         | µg/mL |
|             |          | methyl ester       |             |         |                 |       |
|             |          | octadecanoic acid  | 000112-61-8 | 98+%    | 801 ± 4         | µg/mL |
|             |          | methyl ester       |             |         |                 |       |
|             |          | oleic acid         | 000112-62-9 | 98+%    | 803 ± 4         | µg/mL |
|             |          | methyl ester       |             |         |                 |       |
|             |          | linoleic acid      | 000112-63-0 | 98+%    | 803 ± 4         | µg/mL |
|             |          | methyl ester       |             |         |                 |       |
|             |          | linolenic acid     | 000301-00-8 | 98+%    | 802 ± 4         | µg/mL |
|             |          | methyl ester       |             |         |                 |       |
|             |          | chrysene           | 000218-01-9 | 98+%    | 400 ± 2         | µg/mL |

**Solvent:** n-heptane

ULTRA Scientific uses calibrated Class A glassware and clean bottles in the manufacture of ULTRA standards. Balances used in the manufacture of this standard are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001.

**Date of release:** 07 September 2011

**Date of expiration:** 30 September 2013

\* Purity values updated on 12 November 2014

  
William J. Leach  
Quality Assurance Manager



Agilent Technologies



### Instrument Method Conditions:

Instrument and method conditions used must be fully compliant with the IP391:2006 requirement.

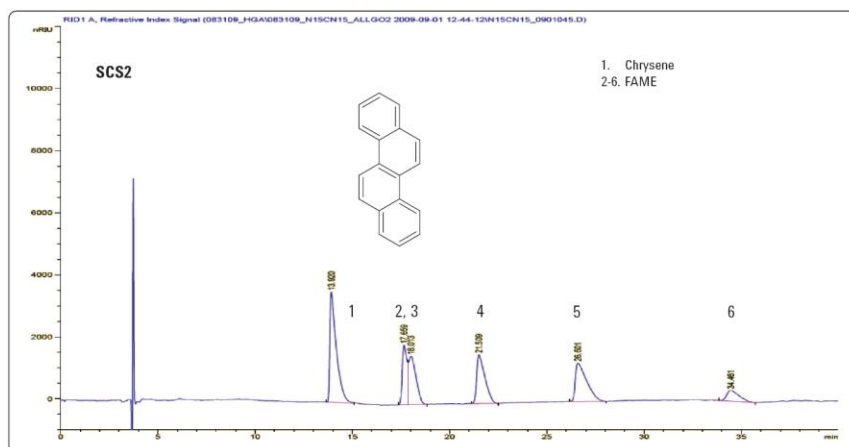
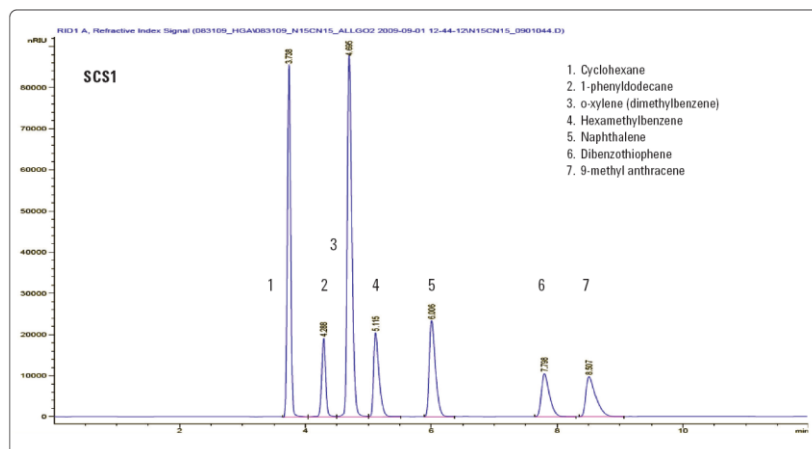
**Mobile phase:** n-heptane at 1ml/min flow rate.

**Column:** ZORBAX NH2 4.6x150mm, 5um, and ZORBAX (RP) SB-CN 4.6x150mm, 5um, in series.

**Column Temperature:** 25°C.

**Detector:** Refractive Index, 35°C.

### Example Signal Traces



  
William J. Leary  
Quality Assurance Manager