

Diesel particulate matter - PAHs and nitro-PAHs

| | |
|-----------------|-----------------------------------|
| Art. ID | NIST-1650b |
| Unit | 200 mg |
| Deliverydetails | No Dangerous Good /not restricted |

Description

Standard Reference Material (SRM®) 1650b is diesel particulate matter and is intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs) and nitro-substituted polycyclic aromatic hydrocarbons (nitro-PAHs) in diesel particulate matter and similar matrices. Reference or information values are also provided for total extractable mass, particle-size distribution, specific surface area, and mutagenic activity. All of the chemical constituents for which certified, reference, and information values are provided in NIST-1650b are naturally present in the diesel particulate material. NIST-1650b was prepared from the same bulk diesel particulate material that was issued previously in 1985 as NIST-1650 and in 2000 as NIST-1650a. A unit of NIST-1650b consists of a bottle containing approximately 200 mg of diesel particulate material. Certified values /// Sample value(s) - please ask for current certificate.

| Text/Information | Analyte/Parameter | CAS number | Concentration/Value | Unit | Method | Source |
|------------------|--------------------------|-------------|---------------------|-------|--------|--------|
| | Naphthalene | [91-20-3] | 5,07 ± 0,43 | mg/kg | | |
| | 1-Methylnaphthalene | [90-12-0] | 1,51 ± 0,12 | mg/kg | | |
| | 2-Methylnaphthalene | [91-57-6] | 3,05 ± 0,56 | mg/kg | | |
| | Phenanthrene | [85-01-8] | 69,5 ± 1,9 | mg/kg | | |
| | Anthracene | [120-12-7] | 7,67 ± 0,47 | mg/kg | | |
| | 1-Methylphenanthrene | [832-69-9] | 28,3 ± 1,5 | mg/kg | | |
| | 2-Methylphenanthrene | [2531-84-2] | 70,7 ± 2,7 | mg/kg | | |
| | 3-Methylphenanthrene | [832-71-3] | 55,1 ± 1,9 | mg/kg | | |
| | 9-Methylphenanthrene | [883-20-5] | 35,1 ± 1,9 | mg/kg | | |
| | Fluoranthene | [206-44-0] | 47,3 ± 0,8 | mg/kg | | |
| | Pyrene | [129-00-0] | 43,4 ± 1,6 | mg/kg | | |
| | Benzo(g,h,i)fluoranthene | [203-12-3] | 10,8 ± 1,0 | mg/kg | | |
| | e | | | | | |
| | Benzo(c)phenanthrene | [195-19-7] | 2,51 ± 0,29 | mg/kg | | |
| | Benzo(a)anthracene | [56-55-3] | 6,18 ± 0,30 | mg/kg | | |
| | Chrysene | [218-01-9] | 13,3 ± 1,1 | mg/kg | | |
| | Triphenylene | [217-59-4] | 9,17 ± 0,94 | mg/kg | | |
| | Benzo(a)fluoranthene | [203-33-8] | 0,370 ± 0,029 | mg/kg | | |
| | Benzo(b)fluoranthene | [205-99-2] | 6,77 ± 0,84 | mg/kg | | |
| | Benzo(j)fluoranthene | [205-82-3] | 3,24 ± 0,42 | mg/kg | | |
| | Benzo(k)fluoranthene | [207-08-9] | 2,37 ± 0,21 | mg/kg | | |
| | Benzo(a)pyrene | [50-32-8] | 1,17 ± 0,09 | mg/kg | | |
| | Benzo(e)pyrene | [192-97-2] | 6,30 ± 0,50 | mg/kg | | |
| | Perylene | [198-55-0] | 0,165 ± 0,032 | mg/kg | | |

| | | | |
|--------------------------|--------------|---------------|-------|
| Benzo(g,h,i)perylene | [191-24-2] | 5,91 ± 0,18 | mg/kg |
| Indeno(1,2,3-cd)pyrene | [193-39-5] | 4,44 ± 0,28 | mg/kg |
| Dibenz(a,c)anthracene | [215-58-7] | 0,438 ± 0,043 | mg/kg |
| Dibenz(a,h)anthracene | [53-70-3] | 0,365 ± 0,071 | mg/kg |
| Dibenz(a,j)anthracene | [224-41-9] | 0,387 ± 0,051 | mg/kg |
| Benzo(b)chrysene | [214-17-5] | 0,290 ± 0,020 | mg/kg |
| Picene | [213-46-7] | 0,499 ± 0,061 | mg/kg |
| 9-Nitroanthracene | [602-60-8] | 5890 ± 310 | µg/kg |
| 1-Nitropyrene | [5522-43-0] | 18200 ± 200 | µg/kg |
| 7-Nitrobenz(a)anthracene | [20268-51-3] | 967 ± 42 | µg/kg |
| 6-Nitrochrysene | [7496-02-8] | 45,5 ± 1,9 | µg/kg |
| 6-Nitrobenzo(a)pyrene | [63041-90-7] | 1390 ± 100 | µg/kg |
| 1,6-Dinitropyrene | [42397-64-8] | 84,0 ± 3,0 | µg/kg |