

105.12 - Respirable Materials

SRMs 1878b and 1879b are crystalline silica materials with particle size in the respirable range. They are intended for use in determining, by x-ray diffraction, the levels of respirable silica in an industrial atmosphere according to National Institute for Occupational Safety and Health ([NIOSH](#)) Analytical Method 7500 or equivalent methods. **NOTE:** These SRMs are not certified for particle size.

Also see [Table 105.10 Respirable Materials on Filter Media](#).

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	Description	Unit of Issue	Measurand(s)
1648a	Urban Particulate Matter	2 g	Certified: 25 elements, 21 PAHs, 7 PCBs Reference values: 8 elements, 54 PAHs, 16 nitro-PAHs, 46 PCBs, 34 pesticides
1649b	Urban Dust	2 g	Certified: 3 elements, 23 PAHs, 13 PCBs, 4 pesticides Reference values: 1 element, 38 PAHs, 16 nitro-PAHs, 49 PCBs, 34 pesticides
1650b	Diesel Particulate Matter	200 mg	Certified: 26 PAHs, 7 nitro-PAHs Reference values: 59 PAHs, 16 nitro-PAHs
1866b	Common Commercial Asbestos	set (3)	chrysotile, amosite, crocidolite
1877	Beryllium Oxide Powder	20 g	35.76 % beryllium
1878b	Respirable Alpha Quartz (Quantitative X-Ray Powder Diffraction Standard)	5 g	96.73 % alpha quartz
1879b	Respirable Cristobalite (Quantitative X-Ray Powder Diffraction Standard)	5 g	93.98 % cristobalite
1975	Diesel Particulate Extract	4 x 1.2 mL	Certified: 8 PAHs, 4 nitro-PAHs Reference values: 23 PAHs, 15 nitro-PAHs, mutagenicity, residue mass
2583	Trace Elements in Indoor Dust (Nominal Mass Fraction of 90 mg/kg Lead)	8 g	Certified: 5 elements
2584	Trace Elements in Indoor Dust (Nominal Mass Fraction of 1 % Lead)	8 g	Certified: 5 elements Reference values: 10 elements
2585	Organic Contaminants in House Dust	10 g	Certified: 33 PAHs, 30 PCBs, 4 pesticides, 15 PBDEs Reference values: 33 PAHs, 12 PCBs, 10 pesticides, 3 PBDEs 5 polycyclic musks, 8 PFAAs
2786	Fine Atmospheric Particulate Matter (Mean Particle Diameter < 4 µm)	100 mg to 140 mg	Certified: 25 PAHs, 2 nitro-PAHs, 2 PBDE, 8 elements Reference values: 27 PAHs, 5 nitro-PAHs, 13 elements, 3 sugars, 5 PBDE, 12 dioxins, 15 furans
2787	Fine Atmospheric Particulate Matter (Mean Particle Diameter < 10 µm)	100 mg to 140 mg	Certified: 23 PAHs, 2 nitro-PAHs, 2 PBDE, 7 elements Reference values: 27 PAHs, 5-nitro-PAHs, 5 PBDE, 14 elements, 3 sugars, 12 dioxins, 15 furans
2975	Diesel Particulate Matter	1 g	Certified: 10 PAHs, 7 nitro-PAHs Reference values: 36 PAHs, 9 nitro-PAHs, particle-size, total extractable mass

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only