

Politecnico di Torino - Dipartimento Energia

Efficiency Assessment

Test No.: 5015 Petitioner: Aerosol Technology Lab
Date: 15/03/2024 Medium: n ° 7 - PAN 6
Measurement no.: 4 Manufacturer: USP-Sao Carlos
Area [m²]: 0.001 Medium type: Polyacrylonitrile
Filter class: Lot:
Aerosol: DEHS Air flow rate through filter: 0.000125[m³/s] (0.45[m³/h])
Sampling cycles: 6 Filter air flow resistance [Pa]: 1100
Sampling cycle time [s]: 60 Air flow rate entering OPC [cm³/min]: 94
Dilution factor: 1 Correlation ratio: 985-03/15/2024 3:10:46 PM-Masc
Neutralizer: OPC: TSI 3340
Conditioned / DischargedNo Test environment: 22.8 °C /39% /98400Pa
Remarks: TSI OPS3340A 0.45m3/h 7.5l/min
Adattore Diameter 40mm 10cm/s. Delta P=1100 Pa
Pressione all'interno del condotto=53 Pa

Size class [µm]	Particle concentration [#/dm³]		Efficiency [%]	Deviation [+/-]	Uncertainty [+/-]	Meaningful cycles
	Upstream	Downstream				
90 - 100 nm	17 559	1 298	92.96	2.79	2.93	6
100 - 120 nm	13 959	2 137	84.43	2.77	2.90	6
120 - 150 nm	16 468	2 881	82.08	3.39	3.56	6
150 - 200 nm	23 956	4 259	81.89	2.55	2.67	6
200 - 250 nm	22 003	3 858	81.73	2.63	2.76	6
250 - 300 nm	18 213	3 050	82.18	1.26	1.32	6
300 - 400 nm	32 096	4 449	85.45	0.64	0.68	6
400 - 550 nm	26 547	3 392	86.56	0.75	0.78	6
550 - 700 nm	13 281	1 406	89.28	0.96	1.00	6
700 - 1000 nm	18 257	1 259	92.98	0.68	0.71	6
1000 - 1300 nm	4 866	191	95.86	0.43	0.45	6
1300 - 1600 nm	4 362	156	96.31	0.83	0.87	6
1600 - 2200 nm	17 049	257	98.48	0.36	0.38	6
2200 - 3000 nm	6 181	5	99.92	0.14	0.15	6
3000 - 4000 nm	1 903	2	99.90	0.24	0.25	6
4000 - 5500 nm	1 049	0	100.00	0.00	0.00	6
5500 - 7000 nm	85	0	100.00	0.00	0.00	6
7000 -10000 nm	8	0	100.00	0.00	0.00	5

