

Politecnico di Torino - Dipartimento Energia

Efficiency Assessment

Test No.: 5015 Petitioner: Aerosol Technology Lab
Date: 11/03/2024 Medium: n ° 8 - PANCO15CNC 6
Measurement no.: 1 Manufacturer: USP-Sao Carlos
Area [m²]: 0.001 Medium type: Polyacrylonitrile+castor oil+cell. nanocrystals
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]: 356
Sampling cycle time [s]: 45 Air flow rate entering OPC [cm³/min]: 95
Dilution factor: 1 Correlation ratio: 981-03/11/2024 4:14:17 PM-Masco
Neutralizer: OPC: TSI 3340
Conditioned / DischargedNo Test environment: 22.7 °C /31% /97400Pa
Remarks: DEHS, OPS 3340A, 7.43sl/min, piastra adattatore d=4cm, Sovrapp. 106Pa

Size class [µm]	Particle concentration [#/dm³]		Efficiency [%]	Deviation [+/-]	Uncertainty [+/-]	Meaningful cycles
	Upstream	Downstream				
90 - 100 nm	26 923	737	97.27	0.33	0.35	6
100 - 120 nm	23 948	1 432	94.34	0.39	0.41	6
120 - 150 nm	25 173	1 881	92.46	0.66	0.69	6
150 - 200 nm	35 737	2 185	93.84	0.47	0.49	6
200 - 250 nm	34 093	1 560	95.48	0.31	0.33	6
250 - 300 nm	27 651	1 127	95.86	0.54	0.57	6
300 - 400 nm	46 141	1 546	96.60	0.35	0.37	6
400 - 550 nm	37 570	971	97.43	0.29	0.31	6
550 - 700 nm	18 596	409	97.84	0.33	0.35	6
700 - 1000 nm	24 176	491	97.89	0.36	0.37	6
1000 - 1300 nm	6 426	96	98.44	0.79	0.83	6
1300 - 1600 nm	5 819	61	98.96	0.46	0.48	6
1600 - 2200 nm	22 580	222	98.98	0.25	0.26	6
2200 - 3000 nm	6 633	14	99.76	0.30	0.32	6
3000 - 4000 nm	1 833	0	100.00	0.00	0.00	6
4000 - 5500 nm	722	0	100.00	0.00	0.00	6
5500 - 7000 nm	68	0	100.00	0.00	0.00	6
7000 -10000 nm	8	0	100.00	0.00	0.00	4

