

Politecnico di Torino - Dipartimento Energia

Efficiency Assessment

Test No.: 5015 *Petitioner:* Aerosol Technology Lab
Date: 17/11/2023 *Medium:* n ° 6 - PANCO 3
Measurement no.: 1 *Manufacturer:* USP-Sao Carlos
Area [m²]: 0.001 *Medium type:* Polyacrylonitrile+Caster oil
Filter class: *Lot:*
Aerosol: DEHS *Air flow rate through filter:* 0.000125556[m³/s] (0.452[m³/h])
Sampling cycles: 6 *Filter air flow resistance [Pa]:* 470
Sampling cycle time [s]: 45 *Air flow rate entering OPC [cm³/min]:* 1000
Dilution factor: 1 *Correlation ratio:* 973-11/17/2023-Mascherine-ops3
Neutralizer: *OPC:* OPS 3330 ip121
Conditioned / Discharged: No *Test environment:* 22 °C /24% /98200Pa
Remarks: TSI OPS3330 0.452m³/h 7.5l/min
 Adattore Diameter 40mm 10cm/s. Delta P=470 Pa
 Pressione all'interno del condotto=15 Pa

Size class [µm]	Particle concentration [#/dm³]		Efficiency [%]	Deviation [+/-]	Uncertainty [+/-]	Meaningful cycles
	Upstream	Downstream				
0.30 - 0.40 µm	24 895	9 188	61.39	1.13	1.19	6
0.40 - 0.55 µm	17 987	6 035	64.86	0.61	0.64	6
0.55 - 0.70 µm	13 083	4 133	67.33	0.82	0.86	6
0.70 - 1.00 µm	17 709	4 811	71.54	0.77	0.81	6
1.00 - 1.30 µm	5 771	1 303	76.13	0.58	0.61	6
1.30 - 1.60 µm	9 810	1 770	81.12	0.95	1.00	6
1.60 - 2.20 µm	10 807	1 241	87.86	0.38	0.40	6
2.20 - 3.00 µm	3 679	176	94.95	0.64	0.67	6
3.00 - 4.00 µm	1 626	23	98.50	0.43	0.45	6
4.00 - 5.50 µm	400	1	99.63	0.34	0.35	6
5.50 - 7.00 µm	32	0	100.00	0.00	0.00	6
7.00 - 10.00 µm	7	0	100.00	0.00	0.00	6

