

Politecnico di Torino - Dipartimento Energia

Efficiency Assessment

Test No.: 5015 *Petitioner:* Aerosol Technology Lab
Date: 21/11/2023 *Medium:* n ° 7 - PAN 6
Measurement no.: 2 *Manufacturer:* USP-Sao Carlos
Area [m²]: 0.001 *Medium type:* Polyacrylonitrile
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]:* 710
Sampling cycle time [s]: 45 *Air flow rate entering OPC [cm³/min]:* 1000
Dilution factor: 1 *Correlation ratio:* 974-11/21/2023 5:04:26 PM-Mas
Neutralizer: OPC: OPS 3330 ip121
Conditioned / Discharged: No *Test environment:* 21.5 °C /39% /97800Pa
Remarks: TSI OPS3330/ 0.452 m³/h / 7.5 l/min,
 Adattatore Diameter 40mm 10 cm/s, DeltaP =710Pa
 Pressione all'interno del condotto= 0Pa

Size class [µm]	Particle concentration [#/dm³]		Efficiency [%]	Deviation [+/-]	Uncertainty [+/-]	Meaningful cycles
	Upstream	Downstream				
0.30 - 0.40 µm	21 248	3 890	80.73	0.23	0.24	6
0.40 - 0.55 µm	13 319	2 683	78.39	1.01	1.06	6
0.55 - 0.70 µm	8 549	1 651	79.26	1.21	1.27	6
0.70 - 1.00 µm	12 567	2 129	81.65	0.28	0.29	6
1.00 - 1.30 µm	4 098	567	85.02	0.73	0.77	6
1.30 - 1.60 µm	7 021	872	86.84	0.53	0.56	6
1.60 - 2.20 µm	7 837	624	91.44	0.38	0.40	6
2.20 - 3.00 µm	2 846	105	96.04	0.45	0.47	6
3.00 - 4.00 µm	1 251	16	98.59	0.39	0.41	6
4.00 - 5.50 µm	344	1	99.79	0.36	0.37	6
5.50 - 7.00 µm	31	0	100.00	0.00	0.00	6
7.00 - 10.00 µm	6	0	100.00	0.00	0.00	6

