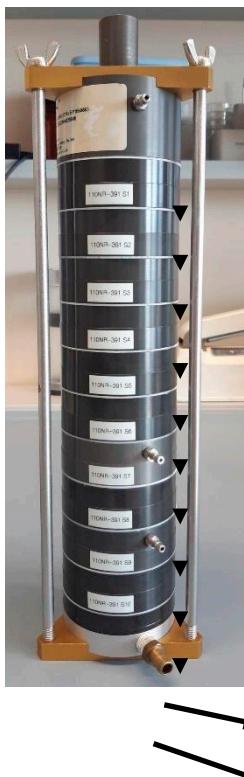


# Supporting information

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Stage	Aerodynamic diameter ( $\mu\text{m}$ )	Class
Inlet	>18	Coarse
S1	18–10	
S2	10–5.6	
S3	5.6–3.2	
S4	3.2–1.8	
S5	1.8–1	
S6	1–0.56	
S7	0.56–0.32	
S8	0.32–0.18	
S9	0.18–0.10	
S10	0.10–0.056	Fine
Outlet (backup)	<0.056	

**Figure S1.** The 10-stage cascade impactor (MOUDI) employed for the sampling in the wind chamber.



**Figure S2.** Flowmeter employed for the correct performance measure of the cascade impactor.

**Table S1.** Instrumental parameters for fluorescein analysis.

Instrumental parameters		
UHPLC		
Column type	Agilent Zorbax SB C18 2.1 X 150 3.5 µm	
Eluent	A H <sub>2</sub> O	B CH <sub>3</sub> OH
	C -	D -
Flow	0.300 mL/min	
Injection volume	20 µL	
Run	0-0.8 min isocratic step at 10% B 0.8-1.5 min gradient from 10% to 100% B 1.5-5 min isocratic step at 100% B 5-6 min equilibration stage at 10% B	
Altis Triple Quadrupole		
Negative potential	-2300 V	
Sheath gas	50 Arb	
Auxiliar gas	5 Arb	
Sweep gas	0 Arb	
Ion transfer tube temperature	250 °C	
Vaporizer temperature	400 °C	

**Table S2.** MS/MS filter parameter for native compound Fluorescein.

Compound	Polarity	Precursor (m/z)	Product (m/z)	RF-Lens	Collision energy
FLUO	(-)	331.148	286.375 (quantifier)	80	19.95
			243.125 (qualifier)	80	25.43

**Table S3.** Values of blank, MDL, MQL, recovery, trueness and precision for fluorescein extraction procedure validation, expressed as the relative percentage standard deviation (RSD%).

Substrate	Blank ( $\mu\text{g L}^{-1}$ )	MDL ( $\mu\text{g L}^{-1}$ )	MQL ( $\mu\text{g L}^{-1}$ )	Recovery (%)	Trueness (%)	Precision (%)
Aluminium	0.022571	0.029368	0.097892	96	-4	4
Quartz	0.04949	0.022782	0.075940	102	7	3