

Príloha č. 1: Protokol o skúškach filtračnej účinnosti membrány



Test protocol	
Test code	PAN 1 JHR EN1822
Type of test:	Flat sheet sample according to EN 1822, EN 779, EN 143 (integral values)
Customer	Technical University of Liberec
Test laboratory:	Technical University of Liberec, CXI, INTEC
Tester:	Jakub Hrůza
Date of test:	26.03.2020

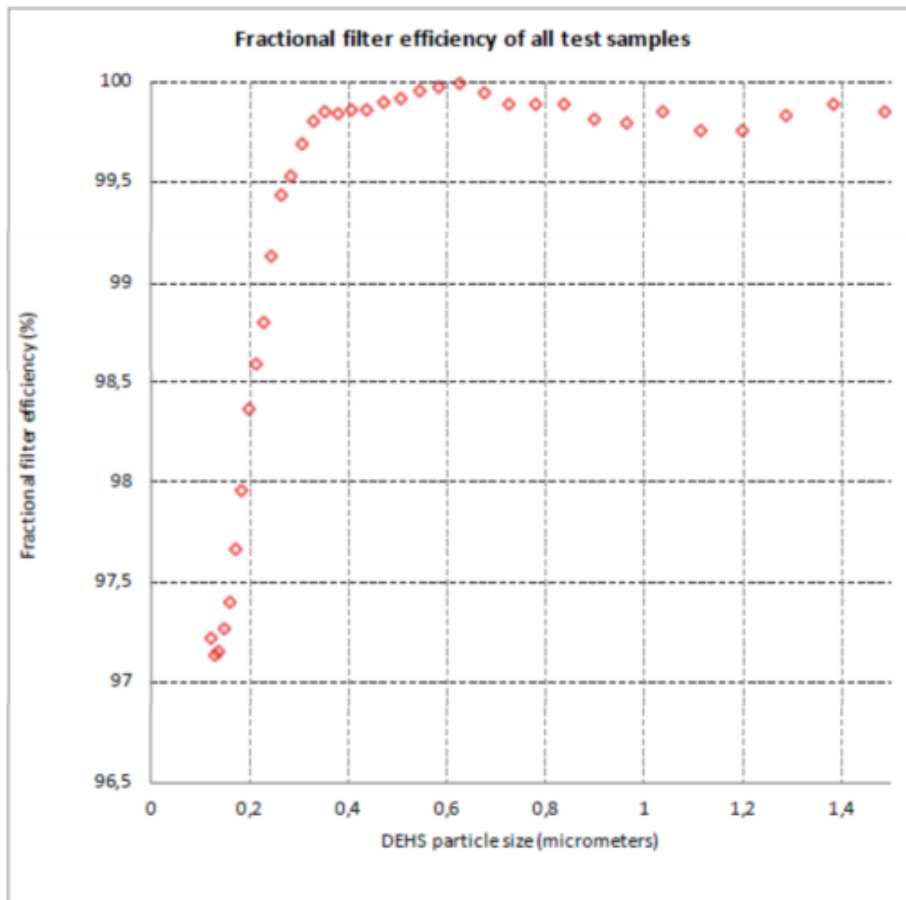
Test parameters	Value	Unit
filter area:	100	cm ²
face velocity:	5.0	cm/sec
dust/aerosol:	DEHS	-
discharge:	no	-
downstream test duration	60	sec
total volume flow:	30.0	l/min
particle size range	0,12 – 3,5	µm
number of test samples	3,00	-
temperature	21	°C
relative humidity	54	%
atmospheric pressure	1010	mbar

Test filter parameters	
Sample:	Description
type: pa6 3 gsm	
0	
0	
0	
0	
0	
0	

Tested properties	
Δp0 (Pa)	Initial pressure drop
Δp1 (Pa)	Final pressure drop (after 1 minute)
E mpps (%)	Efficiency of MPPS (Most Penetrated Particle Size). Usually particle size 0.1 - 0.3µm.
E 0.12 (%)	Efficiency for particle size 0.12 µm

Test results

Sample:	Δp_0 (Pa)	Δp_1 (Pa)	E mpps (%)	E 0.12 (%)	Filtrační třída
type: pa6 3 gsm	117,0	118,0	97,1330	97,2152	
0	0,0	0,0	0,0000	0,0000	
0	0,0	0,0	0,0000	0,0000	
0	0,0	0,0	0,0000	0,0000	
0	0,0	0,0	0,0000	0,0000	
0	0,0	0,0	0,0000	0,0000	
0	0,0	0,0	0,0000	0,0000	



Classification according to EN 779	Average arrestance of synthetic dust (%)	Average efficiency of 0,4 μm DEHS aerosol particles (%)
G1	$A_m < 65$	
G2	$65 \leq A_m < 80$	
G3	$80 \leq A_m < 90$	
G4	$90 \leq A_m$	
M5		$40 \leq E_m < 60$
M6		$60 \leq E_m < 80$
F7		$80 \leq E_m < 90$
F8		$90 \leq E_m < 95$
F9		$95 \leq E_m$

Classification according to EN 1822		Efficiency of MPPS DEHS particles (%)
E10		≥ 85
E11		≥ 95
E12		$\geq 99,5$
H13		$\geq 99,95$
H14		$\geq 99,995$
U15		$\geq 99,9995$
U16		$\geq 99,99995$
U17		$\geq 99,999995$