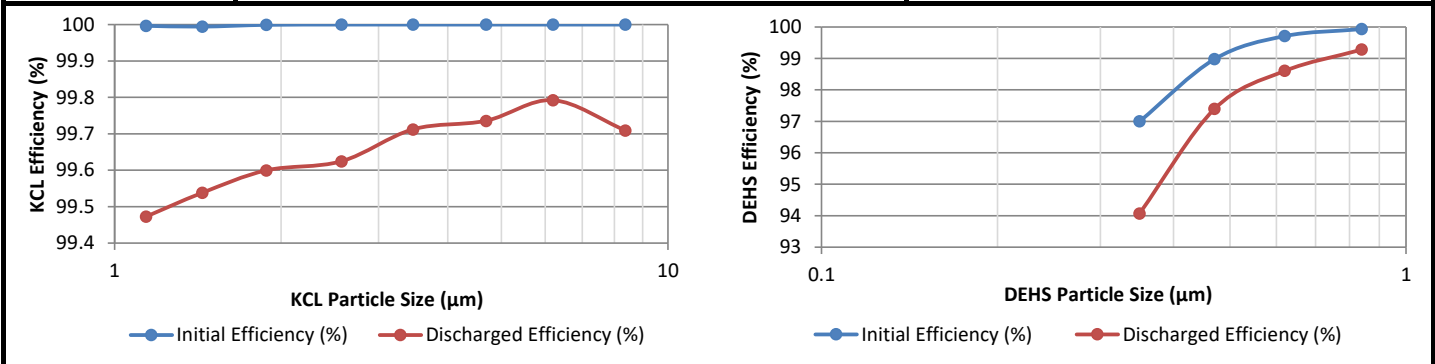


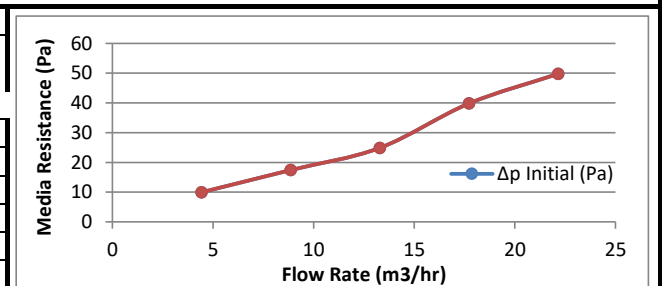
# ISO 16890-2 /-4:2016 Air Filter Test Result Summary

<b>Counter Information</b>	Manufacturer <u>TSI, Inc.</u>	<b>Test Conditions</b>	Test Flow Rate <u>10.4 CFM / 17.72 m3/h</u>
	Model No. <u>3330</u>		Test Aerosol <u>Aerosolized KCl &amp; DEHS</u>
Serial No. <u>3330174305</u>	Temperature <u>69.0 Deg F / 20.6 Deg C</u>		
IPA Discharge Method <input checked="" type="checkbox"/> Vapor Treated <input type="checkbox"/> IPA Dip Method	Relative Humidity <u>36.6 %</u>		
			Barometer <u>29.31 in Hg / 99.26 kPa</u>

<b>Device Tested</b>	Manufacturer <u>JP Air Tech</u>
	Model <u>JX78-B-PTFE-MEM</u>
	Dimensions <u>16" x 16"</u>
	Type of Media <u>Flat Sheet Media</u>
	Media Area <u>1.0 ft2 / 0.09 m2 Tested Area</u>
	Construction <u>NA</u>
	Filter/Media Electrostatic Charge <u>N/A</u>
	Media Color <u>White</u>
	Media Adhesive <u>NA</u>
Sample Procurement <u>JP Air Tech</u>	



KCL					
Range (µm)	Geo. Mean	Initial Efficiency (%)	Discharged Efficiency (%)	Upstream Number of Particles per Test	
				Pre	Post
1.0-1.3	1.14	100.0	99.5	88062	107317
1.3-1.6	1.44	100.0	99.5	52699	64270
1.6-2.0	1.88	100.0	99.6	135046	160376
2.0-3.0	2.57	100.0	99.6	91300	106857
3.0-4.0	3.46	100.0	99.7	47913	55995
4.0-5.5	4.69	100.0	99.7	26205	30350
5.5-7.0	6.20	100.0	99.8	6255	7499
7.0-10.0	8.37	100.0	99.7	3356	4287



%	m <sup>3</sup> /h	Δp Initial (Pa)	Δp Post IPA (Pa)
25	4.43	10.0	10.0
50	8.86	17.4	17.4
75	13.29	24.9	24.9
100	17.72	39.8	39.8
125	22.15	49.8	49.8

DEHS					
Range (µm)	Geo. Mean	Initial Efficiency (%)	Discharged Efficiency (%)	Upstream Number of Particles per Test	
				Pre	Post
0.3-0.4	0.35	97	94	483839	519036
0.4-0.55	0.47	99	97	453642	487772
0.55-0.7	0.62	100	99	288372	309016
0.7-1.0	0.84	100	99	427705	452775

Reporting Data			
	ePM <sub>1</sub>	ePM <sub>2.5</sub>	ePM <sub>10</sub>
<b>Minimum</b>	<b>97%</b>	<b>98%</b>	<b>99%</b>
<b>Average</b>	<b>98%</b>	<b>98%</b>	<b>99%</b>
<b>Reported</b>	<b>95%</b>	<b>95%</b>	<b>95%</b>

<b>Requestor Information</b>	Test Requestor <u>Cagri Tekman</u>	Phone: <u>+90 532 686 9259</u>
	Company Name <u>JP Air Tech</u>	Email: <u>ct@jpairtech.com</u>
	Company Address <u>Skifervej 2, 4990 Sakskobing, Denmark</u>	Requested Date: _____

ISO 16890-1										
Data Entry Table							Reporting Data			
DEHS								ePM <sub>1</sub>	ePM <sub>2,5</sub>	ePM <sub>10</sub>
$d_i$	$d_{i+1}$	$d_m$	$\Delta \ln d_i$	$E_i$	$E_{D,i}$	$E_{A,i}$	Minimum	97%	98%	--
0.30	0.40	0.35	0.29	97.0%	94.1%	95.5%	Average	98%	98%	99%
0.40	0.55	0.47	0.32	99.0%	97.4%	98.2%	Reported	95%	95%	95%
0.55	0.70	0.62	0.24	99.7%	98.6%	99.2%				
0.70	1.00	0.84	0.36	99.9%	99.3%	99.6%				
KCL										
1.00	1.30	1.14	0.26	100.0%	99.5%	99.7%				
1.30	1.60	1.44	0.21	100.0%	99.5%	99.8%				
1.60	2.20	1.88	0.32	100.0%	99.6%	99.8%				
2.20	3.00	2.57	0.31	100.0%	99.6%	99.8%				
3.00	4.00	3.46	0.29	100.0%	99.7%	99.9%				
4.00	5.50	4.69	0.32	100.0%	99.7%	99.9%				
5.50	7.00	6.20	0.24	100.0%	99.8%	99.9%				
7.00	10.00	8.37	0.36	100.0%	99.7%	99.9%				
ePM <sub>1</sub> Calculations										
$d_i$	$d_{i+1}$	$d_m$	$\Delta \ln d_i$	$E_{A,i}$	$q_{3\sigma}$	$q_{3\sigma} * \Delta \ln d_i$	$E_{D,i} * q_{3\sigma} * \Delta \ln d_i$	$E_{A,i} * q_{3\sigma} * \Delta \ln d_i$	E <sub>min</sub> (PM <sub>1</sub> )	E(PM <sub>1</sub> )
0.30	0.40	0.35	0.29	95.5%	22.627%	0.065095	0.061234	0.062186	97%	98%
0.40	0.55	0.47	0.32	98.2%	19.891%	0.063343	0.061690	0.062192		
0.55	0.70	0.62	0.24	99.2%	15.837%	0.038193	0.037660	0.037871		
0.70	1.00	0.84	0.36	99.6%	11.522%	0.041097	0.040802	0.040936		
Sums:					0.207728	0.201385	0.203185			
ePM <sub>2,5</sub> Calculations										
$d_i$	$d_{i+1}$	$d_m$	$\Delta \ln d_i$	$E_{A,i}$	$q_{3\sigma}$	$q_{3\sigma} * \Delta \ln d_i$	$E_{D,i} * q_{3\sigma} * \Delta \ln d_i$	$E_{A,i} * q_{3\sigma} * \Delta \ln d_i$	E <sub>min</sub> (PM <sub>2,5</sub> )	E(PM <sub>2,5</sub> )
0.30	0.40	0.35	0.29	95.5%	22.627%	0.065095	0.061234	0.062186	98%	98%
0.40	0.55	0.47	0.32	98.2%	19.891%	0.063343	0.061690	0.062192		
0.55	0.70	0.62	0.24	99.2%	15.837%	0.038193	0.037660	0.037871		
0.70	1.00	0.84	0.36	99.6%	11.522%	0.041097	0.040802	0.040936		
1.00	1.30	1.14	0.26	99.7%	8.503%	0.022309	0.022192	0.022250		
1.30	1.60	1.44	0.21	99.8%	7.618%	0.015817	0.015744	0.015780		
1.60	2.20	1.88	0.32	99.8%	8.022%	0.025546	0.025444	0.025495		
2.20	3.00	2.57	0.31	99.8%	9.984%	0.030966	0.030849	0.030907		
Sums:					0.302366	0.295614	0.297618			
ePM <sub>10</sub> Calculations										
$d_i$	$d_{i+1}$	$d_m$	$\Delta \ln d_i$	$E_{A,i}$	$q_{3\sigma}$	$q_{3\sigma} * \Delta \ln d_i$	$E_{D,i} * q_{3\sigma} * \Delta \ln d_i$	$E_{A,i} * q_{3\sigma} * \Delta \ln d_i$	E <sub>min</sub> (PM <sub>10</sub> )	E(PM <sub>10</sub> )
0.30	0.40	0.35	0.29	95.5%	9.412%	0.027077	0.025471	0.025867	99%	99%
0.40	0.55	0.47	0.32	98.2%	8.395%	0.026733	0.026035	0.026247		
0.55	0.70	0.62	0.24	99.2%	7.432%	0.017924	0.017674	0.017773		
0.70	1.00	0.84	0.36	99.6%	7.014%	0.025016	0.024836	0.024918		
1.00	1.30	1.14	0.26	99.7%	7.628%	0.020013	0.019908	0.019960		
1.30	1.60	1.44	0.21	99.8%	8.833%	0.018340	0.018255	0.018297		
1.60	2.20	1.88	0.32	99.8%	10.804%	0.034406	0.034269	0.034337		
2.20	3.00	2.57	0.31	99.8%	13.726%	0.042573	0.042413	0.042493		
3.00	4.00	3.46	0.29	99.9%	16.708%	0.048067	0.047929	0.047998		
4.00	5.50	4.69	0.32	99.9%	19.542%	0.062233	0.062069	0.062151		
5.50	7.00	6.20	0.24	99.9%	21.671%	0.052261	0.052153	0.052207		
7.00	10.00	8.37	0.36	99.9%	23.143%	0.082545	0.082305	0.082425		
Sums:					0.457189	0.453316	0.454673			

