Blue Heaven Technologies

2820 S. English Station Road - Louisville, KY 40299

TEST NO. 18-020-2

EN-1822-3 Test Report - Flat Sheet Media

Efficiency Test of Particles Sized 0.02 - 0.5 µm

Filter Description

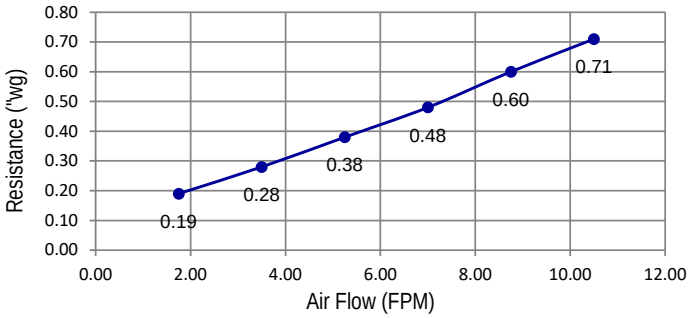
Manufacturer	JP Air Tech	
Filter Model	Flat Sheet Media	
Part Number	JX143-PTFE MEMBRANE	
Test Area	1.0 ft^2	0.093 m2
Media Type	80/20 + PTFE MEMBRANE	
Media Color	White	
Sample Procurement	JP Air Tech	

Test Conditions

Test Air Flow Rate (FPM / cm/s)	7 FPM	3.56 cm/s
Challenge Aerosol	DEHS	
Counter Information	TSI 3080 Classifier / TSI 3772 CPC Counter	
Test Temperature (ºF / ºC)	71.8 Deg F	22.1 Deg C
Relative Humidity (%)	25.4	
Barometric Pressure (" Hg / Pa)	29.63 in. Hg	100.34 kPa

Air Flow Versus Resistance

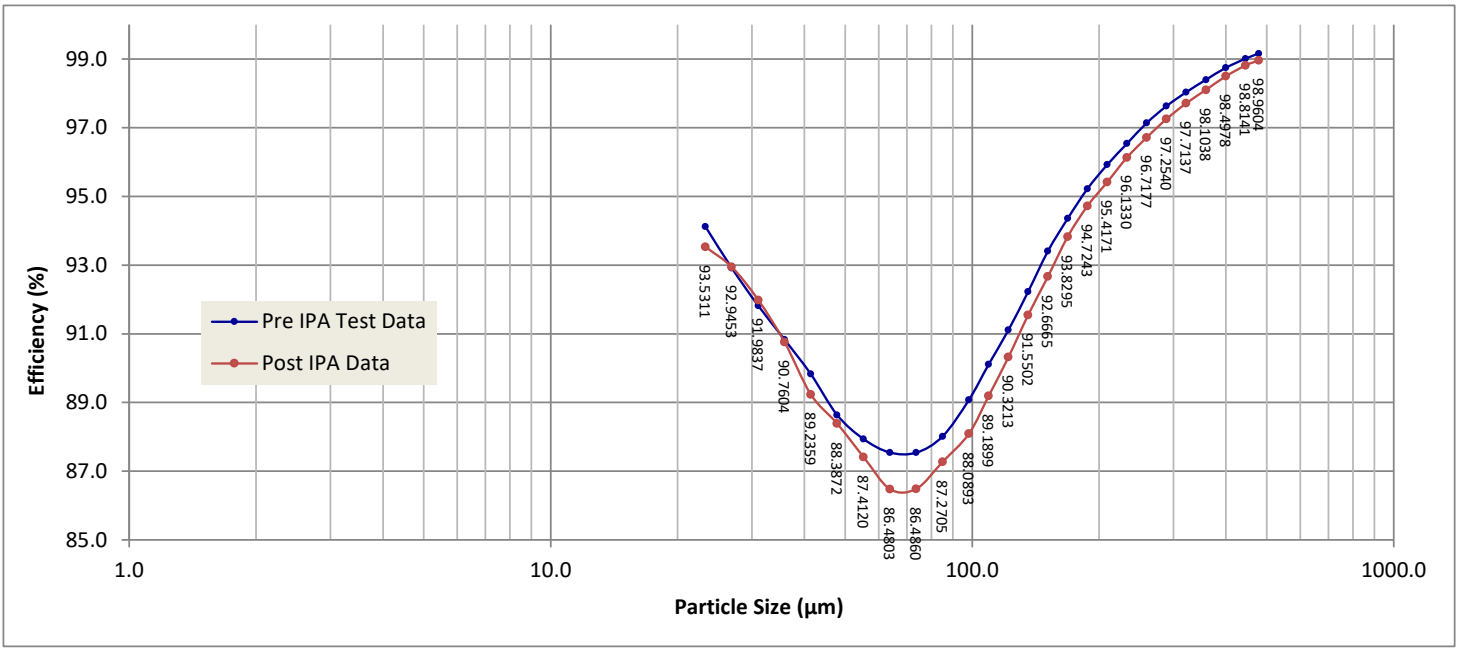
	Velocity	Pre IPA Discharge		Post IPA Discharge	
(%)	FPM / cm/s	"WG	Pa	"WG	Pa
25	1.75 / 2.97	0.19	47	0.21	52
50	3.50 / 5.95	0.28	70	0.30	75
75	5.25 / 8.92	0.38	95	0.41	102
100	7.00 / 11.89	0.48	119	0.53	132
125	8.75 / 14.87	0.60	149	0.64	159
150	10.50 / 17.84	0.71	177	0.76	189



Test Results

EN-1822 Results

Airflow Rate	7.00 CFM / 11.9 m3/hr
Nominal Face Velocity	7 FPM
Initial Resistance	0.48 inch WG / 119.4 Pa
MPPS Determination	0.0638 µm
IPA Discharged Efficiency at MPPS	86.4803 %
Projected Rating (Min. Integral for E11 ≥ 95%)	E10 > 85%



Requestor Information	Test Requestor Jørgen Poulsen	Phone:	+45 5495 0025
	Company Name JP Air Tech	Email:	jp@jpairtech.com
	Company Address Skifervej 2, DK-4990 Sakskobing, Denmark	Date Requested	1/2/2018
Test Operator Information	Test Performed by: Glen D Toloczko CAFS	Completion Date	1/16/2018

Data - Initial Resistance

	Pre IPA			Post IPA Discharge		
Airflow (FPM)	Resistance (in WG)	Airflow (m3/h)	Resistance (Pa)	Resistance (in WG)	Airflow (m3/h)	Resistance (Pa)
1.75	0.19	3.0	47.3	0.21	3.0	52.2
3.50	0.28	5.9	69.7	0.30	5.9	74.6
5.25	0.38	8.9	94.5	0.41	8.9	102.0
7.00	0.48	11.9	119.4	0.53	11.9	131.9
8.75	0.60	14.9	149.3	0.64	14.9	159.2
10.50	0.71	17.8	176.6	0.76	17.8	189.1

Data - Particle Removal Efficiency

Particle Size Range (nm)	MPPS	Particle Removal Efficiency (%)		
		(µm)	Pre IPA	Post IPA
17.48		0.0175	95.5893	94.1584
20.19		0.0202	93.9126	94.6493
23.29		0.0233	94.1179	93.5311
26.88		0.0269	92.9166	92.9453
31.08		0.0311	91.8144	91.9837
35.87		0.0359	90.8335	90.7604
41.41		0.0414	89.8277	89.2359
47.82		0.0478	88.6363	88.3872
55.25		0.0552	87.9353	87.4120
63.78	MPPS	0.0638	87.5443	86.4803
73.64		0.0736	87.5397	86.4860
85.05		0.0850	88.0138	87.2705
98.19		0.0982	89.0753	88.0893
109.40		0.1094	90.1096	89.1899
121.88		0.1219	91.1093	90.3213
135.76		0.1358	92.2300	91.5502
151.22		0.1512	93.4069	92.6665
168.50		0.1685	94.3567	93.8295
187.72		0.1877	95.2246	94.7243
209.09		0.2091	95.9226	95.4171
232.90		0.2329	96.5376	96.1330
259.46		0.2595	97.1400	96.7177
289.03		0.2890	97.6299	97.2540
321.98		0.3220	98.0355	97.7137
358.68		0.3587	98.3988	98.1038
399.54		0.3995	98.7441	98.4978
445.10		0.4451	99.0112	98.8141