

CAPILLARY FLOW ANALYSIS

2022-07-07

Porous Measurement Int'l Group (CYIPMI)
Analytical Services Division
Email: info@cyi-pmi.com
Website: www.cyi-pmi.com

Operator:
Lot Number:
Hardware Serial Number: CFP-1100AEXL
Type of test: Dry Up/Wet Up
Wet Parameter: D:\SCOTT\COTTON FIBER-S.TPF
Dry Parameter: D:\SCOTT\COTTON FIBER-S.TPF
Lohm Table: 20191104.cal
Tortuosity Factor: .715

FLUID = Galwick
SURFACE TENSION = 15.9 DYNES/CM

File = 2022-07-07_Hangzhou Baimai Home Products Co.,Ltd.CFT

SAMPLE ID = 100% Cotton 40x40 S/133x100

MEAN FLOW PORE PRESSURE = 1.170 PSI
MEAN FLOW PORE DIAMETER = 5.6375 MICRONS
BUBBLE POINT PRESSURE = 0.288 PSI
BUBBLE POINT PORE DIAMETER = 22.9457 MICRONS

Filter flow% = 100 * WET FLOW / DRY FLOW
INCR FF% = Filter flow%(current) - Filter flow%(previous)
PORE DISTRIBUTION = INCR FF% / (DIAMETER(previous)-DIAMETER(current))

DIFFERENTIAL

PRESSURE DIAMETER WET FLOW DRY FLOW INCR FILTER PORE AVERAGE 1/2 DRY FLOW
PSI MICRONS L/MIN L/MIN FF% FLOW% DIST DIAMETER L/MIN

0.2876	22.9457	0.01004	1.586	0.633	0.633	0.793			
0.3044	21.6771	0.01147	1.689	0.046	0.679	0.0361	22.3114	0.844	
0.7855	8.4000	1.39020	4.543	29.924	30.603	2.2538	15.0385	2.271	
1.1645	5.6665	3.41547	6.861	19.178	49.781	7.0161	7.0332	3.430	
1.5311	4.3096	5.40450	8.941	10.664	60.445	7.8589	4.9880	4.471	
1.7011	3.8790	6.45400	9.997	4.115	64.561	9.5588	4.0943	4.998	
1.7106	3.8575	6.49733	10.056	0.053	64.613	2.4592	3.8683	5.028	
1.7209	3.8344	6.55067	10.120	0.118	64.732	5.1122	3.8460	5.060	
1.7412	3.7896	6.71650	10.236	0.886	65.617	19.7441	3.8120	5.118	
1.8284	3.6088	7.23033	10.478	3.386	69.004	18.7336	3.6992	5.239	
1.8660	3.5361	7.45900	10.583	1.480	70.484	20.3714	3.5725	5.291	
2.0174	3.2708	8.33900	11.003	5.303	75.787	19.9844	3.4035	5.502	
2.2108	2.9847	9.40800	11.945	2.973	78.760	10.3910	3.1277	5.973	
2.6362	2.5030	11.32859	14.101	1.580	80.340	3.2810	2.7438	7.050	
2.9347	2.2484	12.76445	15.716	0.881	81.222	3.4614	2.3757	7.858	
3.3976	1.9421	15.14448	18.234	1.835	83.057	5.9916	2.0953	9.117	
3.7867	1.7426	17.43626	20.285	2.901	85.958	14.5359	1.8423	10.142	
4.1847	1.5768	19.80227	22.408	2.415	88.373	14.5688	1.6597	11.204	
4.5399	1.4534	22.15989	24.230	3.083	91.456	24.9956	1.5151	12.115	
4.9458	1.3342	24.16309	27.151	0.000	91.456	0.0000	1.3938	13.575	
5.2535	1.2560	26.75604	28.871	1.217	92.673	15.5729	1.2951	14.436	
5.5177	1.1959	28.30537	30.249	0.901	93.574	14.9886	1.2259	15.125	
6.0767	1.0859	31.60295	33.264	1.432	95.006	13.0138	1.1409	16.632	
6.4780	1.0186	34.09224	35.357	1.418	96.424	21.0770	1.0522	17.678	
6.8204	0.9675	36.39522	37.030	1.862	98.286	36.4072	0.9930	18.515	
7.0855	0.9313	37.88852	38.488	0.157	98.442	4.3330	0.9494	19.244	
7.5932	0.8690	40.59494	41.240	0.000	98.442	0.0000	0.9001	20.620	
7.9905	0.8258	42.83068	43.277	0.525	98.968	12.1511	0.8474	21.639	
8.3863	0.7868	44.92494	45.243	0.328	99.296	8.4264	0.8063	22.622	
8.6653	0.7615	46.44065	46.734	0.076	99.372	3.0187	0.7742	23.367	
9.2580	0.7127	49.37120	49.705	0.000	99.372	0.0000	0.7371	24.852	
9.6344	0.6849	51.39262	51.617	0.192	99.565	6.9018	0.6988	25.809	
10.1262	0.6516	53.92113	54.079	0.144	99.708	4.3254	0.6683	27.039	
10.4343	0.6324	55.36680	55.741	0.000	99.708	0.0000	0.6420	27.871	
11.0535	0.5970	58.30856	59.009	0.000	99.708	0.0000	0.6147	29.504	
11.2691	0.5855	59.55531	59.969	0.000	99.708	0.0000	0.5912	29.985	
11.9482	0.5523	62.85289	63.470	0.000	99.708	0.0000	0.5689	31.735	

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12.4267	0.5310	65.35199	65.916	0.000	99.708	0.0000	0.5416	32.958
12.9631	0.5090	67.97996	68.531	0.000	99.708	0.0000	0.5200	34.266
13.5706	0.4862	71.05201	71.611	0.000	99.708	0.0000	0.4976	35.805
13.8859	0.4752	72.56771	73.275	0.000	99.708	0.0000	0.4807	36.638
14.1892	0.4650	74.12124	74.759	0.000	99.708	0.0000	0.4701	37.379
14.5122	0.4547	75.85409	76.349	0.000	99.708	0.0000	0.4599	38.174
14.8197	0.4453	77.33477	77.871	0.000	99.708	0.0000	0.4500	38.935
15.1307	0.4361	78.88550	79.367	0.000	99.708	0.0000	0.4407	39.683



SUMMARY SHEET

2022-07-07

SAMPLE ID = 100% Cotton 40x40 S/133x100
LOT NUMBER =

TORTUOSITY = 0.715

Operator:

Lot Number:

Hardware Serial Number: CFP-1100AEXL

Type of test: Dry Up/Wet Up

Wet Parameter: D:\SCOTT\COTTON FIBER-S.TPF

Dry Parameter: D:\SCOTT\COTTON FIBER-S.TPF

Lohm Table: 20191104.cal

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File = 2022-07-07_Hangzhou Baimai Home Products Co.,Ltd.CFT

SMALLEST DETECTED PORE DIAMETER (AT 98.29% CFF) = 0.9675 MICRONS
PRESSURE AT SMALLEST PORE = 6.820 PSI

MEAN FLOW PORE PRESSURE = 1.170 PSI
MEAN FLOW PORE DIAMETER = 5.6375 MICRONS

LARGEST DETECTED PORE DIAMETER = 22.9457 MICRONS
PRESSURE AT LARGEST PORE = 0.288 PSI

STANDARD DEVIATION OF AVG. PORE DIAMETER = 5.3951

BUBBLE POINT PRESSURE = 0.288 PSI
BUBBLE POINT PORE DIAMETER = 22.9457 MICRONS

MAXIMUM PORE SIZE DISTRIBUTION = 36.4072

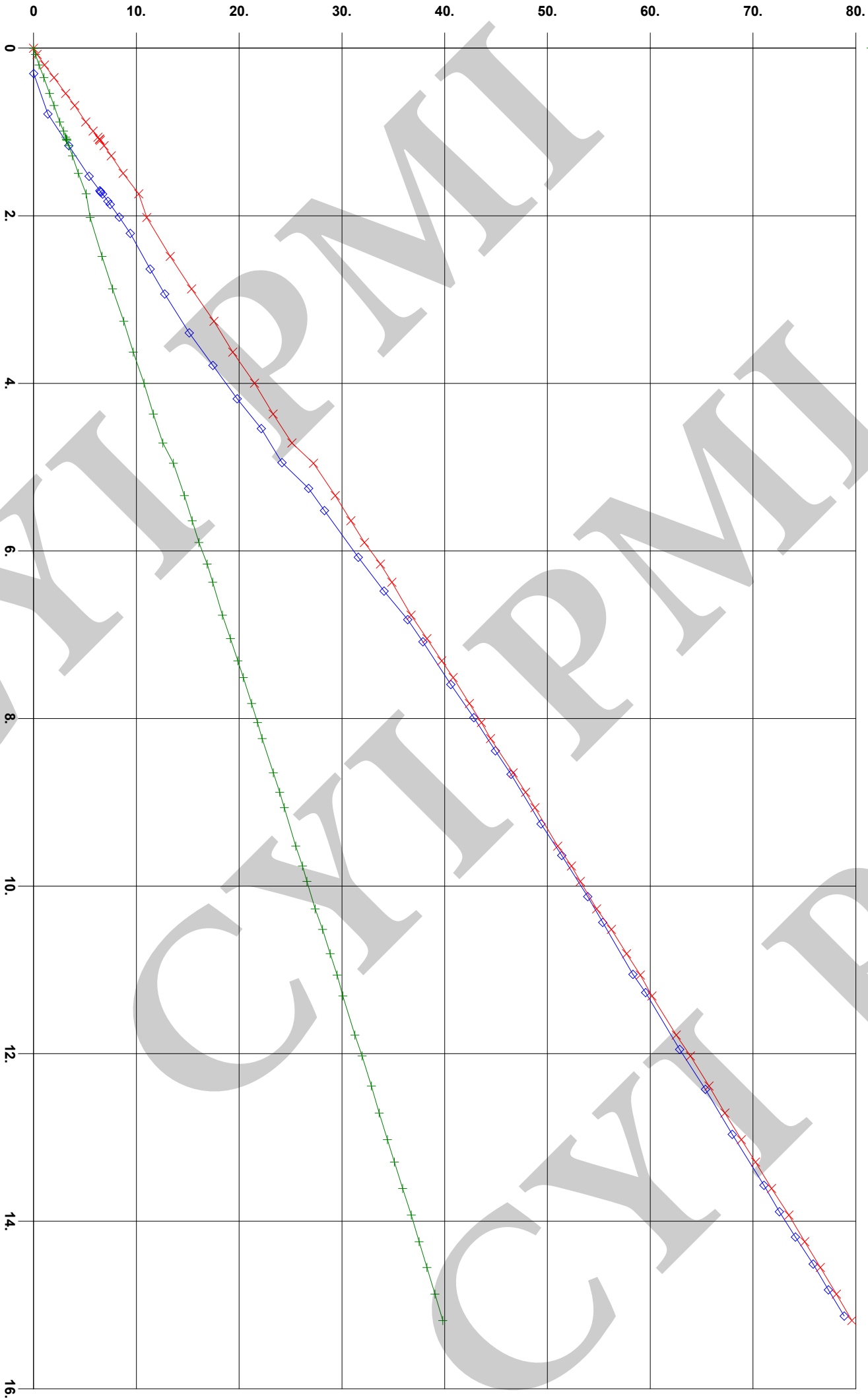
DIAMETER AT MAXIMUM PORE SIZE DISTRIBUTION = 0.9675 MICRONS

10% Cumulative Filter Flow occurs at 17.5414 microns
25% Cumulative Filter Flow occurs at 10.8859 microns
75% Cumulative Filter Flow occurs at 3.3102 microns
90% Cumulative Filter Flow occurs at 1.5117 microns

FLOW RATE L/MIN

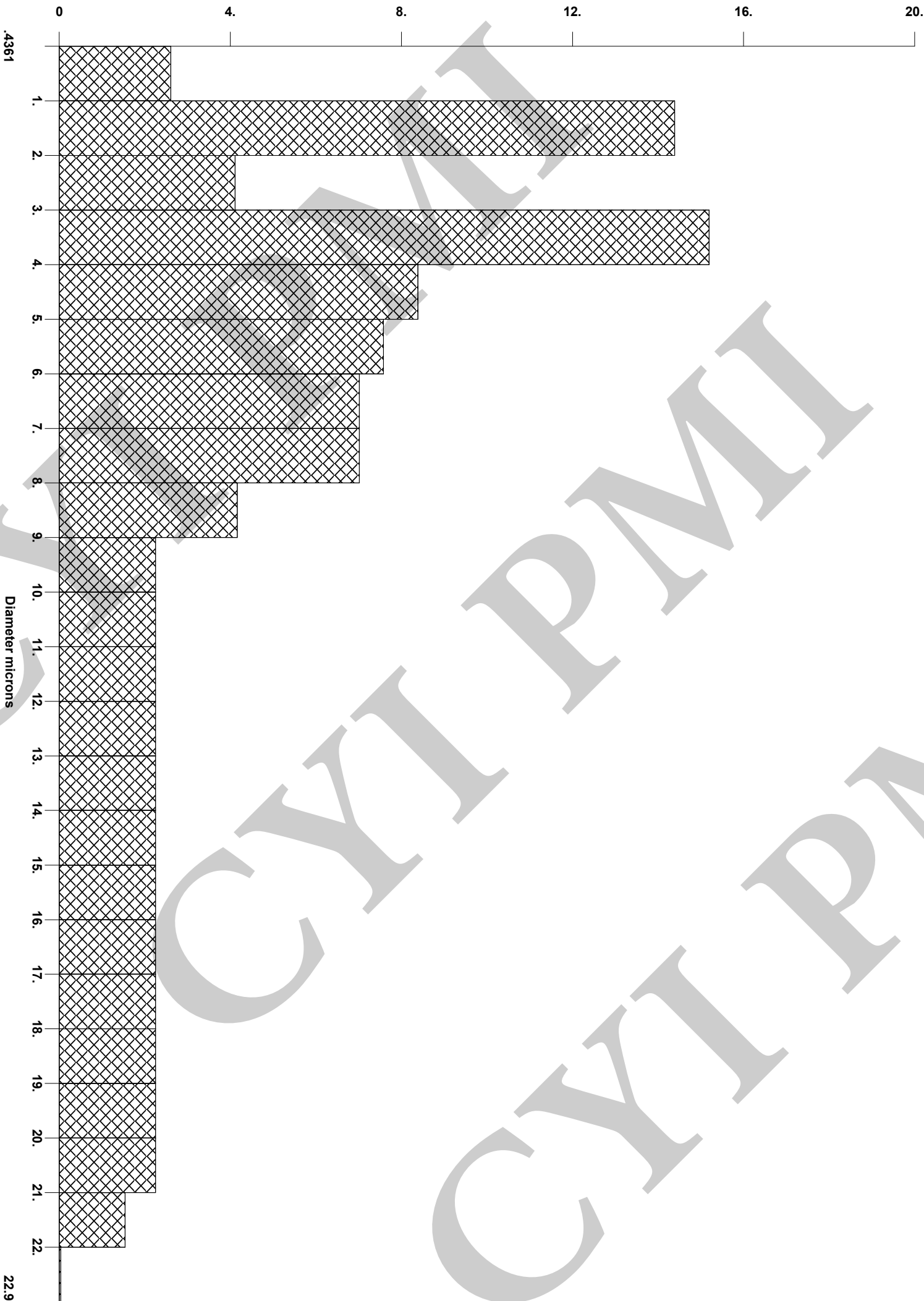
FLOW RATE VS PRESSURE

- 2022-07-07_Hangzhou Baimai Home Products Co.,Ltd: 100% Cotton 40x40 S/133x100 - wet
- 2022-07-07_Hangzhou Baimai Home Products Co.,Ltd: 100% Cotton 40x40 S/133x100 - dry
- 2022-07-07_Hangzhou Baimai Home Products Co.,Ltd: 100% Cotton 40x40 S/133x100 - 1/2 dry



PRESSURE (PSI)

PORE SIZE DISTRIBUTION



Diameter microns

.4361

22.94573