micromeritics®

UES - UEDA ENVIRONMENTAL SOLUTIONS

Sample: MD
Operator: W.S
Submitter: s/n 212
File: C:\MicroActive for ASAP 2460\data\UES\MD.SMP

Started:	2015/06/17 8:18:32	Analysis Adsorptive:	N2
Completed:	2015/06/17 15:24:02	Analysis Bath Temp.:	-195.800 °C
Report Time:	2016/11/24 17:27:34	Thermal Correction:	No
Sample Mass:	0.0990 g	Warm Free Space:	17.5457 cm^3 Measured
Cold Free Space:	51.0377 cm^3	Equilibration Interval:	10 s
Low Pressure Dose:	20.0000 cm^3/g STP	Sample Density:	1.000 g/cm^3
Automatic Degas:	No		

Summary Report

Surface Area

BET Surface Area: 1,526.5427 m^2/g

Langmuir Surface Area: 1,850.4137 m^2/g

t-Plot Micropore Area: 1,204.9542 m^2/g

Pore Volume

t-Plot micropore volume: 0.465358 cm^3/g

BJH Adsorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.127173 cm^3/g

BJH Desorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.126134 cm^3/g

Pore Size

BJH Adsorption average pore diameter (4V/A): 3.1899 nm

BJH Desorption average pore diameter (4V/A): 3.1211 nm

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Sample Density: 1.000 g/cm³

BJH Adsorption Pore Distribution Report

Faas Correction
Harkins and Jura
t = [13.99 / (0.034 - log(P/Po))] ^ 0.5

Diameter Range: 1.7000 nm to 300.0000 nm
Adsorbate Property Factor: 0.95300 nm
Density Conversion Factor: 0.0015468
Fraction of Pores Open at Both Ends: 0.00

Pore Diameter Range (nm)	Average Diameter (nm)	Incremental Pore Volume (cm³/g)	Cumulative Pore Volume (cm³/g)	Incremental Pore Area (m²/g)	Cumulative Pore Area (m²/g)
302.6 - 166.2	197.3	0.004836	0.004836	0.098	0.098
166.2 - 93.5	110.6	0.004456	0.009292	0.161	0.259
93.5 - 65.3	74.4	0.002787	0.012079	0.150	0.409
65.3 - 49.6	55.3	0.002212	0.014292	0.160	0.569
49.6 - 39.6	43.5	0.002169	0.016460	0.200	0.769
39.6 - 26.9	30.8	0.004505	0.020965	0.585	1.354
26.9 - 20.6	22.9	0.003865	0.024830	0.676	2.029
20.6 - 16.7	18.2	0.003054	0.027883	0.671	2.701
16.7 - 14.0	15.1	0.002463	0.030346	0.653	3.354
14.0 - 12.1	12.9	0.002014	0.032360	0.625	3.979
12.1 - 10.6	11.2	0.001729	0.034089	0.616	4.595
10.6 - 9.4	9.9	0.001541	0.035630	0.620	5.216
9.4 - 8.5	8.9	0.001401	0.037030	0.629	5.844
8.5 - 7.7	8.1	0.001289	0.038319	0.639	6.484
7.7 - 7.1	7.4	0.001265	0.039583	0.688	7.171
7.1 - 6.5	6.7	0.001166	0.040749	0.691	7.862
6.5 - 6.0	6.2	0.001233	0.041982	0.791	8.654
6.0 - 5.6	5.8	0.001163	0.043145	0.805	9.459
5.6 - 5.2	5.4	0.001183	0.044329	0.880	10.339
5.2 - 4.9	5.0	0.001226	0.045555	0.976	11.315
4.9 - 4.6	4.7	0.001314	0.046869	1.116	12.431
4.6 - 4.3	4.4	0.001373	0.048242	1.243	13.674
4.3 - 4.0	4.2	0.001477	0.049719	1.422	15.096
4.0 - 3.8	3.9	0.001568	0.051287	1.602	16.698
3.8 - 3.6	3.7	0.001731	0.053018	1.874	18.571
3.6 - 3.4	3.5	0.001845	0.054863	2.114	20.685
3.4 - 3.2	3.3	0.002112	0.056975	2.559	23.244
3.2 - 3.0	3.1	0.002337	0.059312	2.992	26.236
3.0 - 2.9	3.0	0.002469	0.061780	3.335	29.572
2.9 - 2.7	2.8	0.002870	0.064651	4.092	33.664
2.7 - 2.6	2.7	0.003263	0.067913	4.912	38.576
2.6 - 2.5	2.5	0.003725	0.071639	5.922	44.498
2.5 - 2.3	2.4	0.004281	0.075920	7.190	51.688
2.3 - 2.2	2.3	0.004934	0.080854	8.753	60.441
2.2 - 2.1	2.1	0.005985	0.086839	11.215	71.656
2.1 - 2.0	2.0	0.008277	0.095116	16.444	88.100

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2.0 - 1.8	1.9	0.012367	0.107483	26.257	114.357
1.8 - 1.7	1.7	0.019690	0.127173	45.113	159.471