

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

Started: 2016/11/24 5:51:25	Analysis Adsorptive: N2
Completed: 2016/11/24 11:58:51	Analysis Bath Temp.: -195.800 °C
Report Time: 2016/11/24 14:30:06	Thermal Correction: No
Sample Mass: 0.0867 g	Warm Free Space: 18.3390 cm <sup>3</sup> Measured
Cold Free Space: 52.4080 cm <sup>3</sup>	Equilibration Interval: 10 s
Low Pressure Dose: 20.0000 cm <sup>3</sup> /g STP	Sample Density: 1.000 g/cm <sup>3</sup>
Automatic Degas: No	

### Summary Report

#### Surface Area

BET Surface Area: 1,200.7437 m<sup>2</sup>/g  
Langmuir Surface Area: 1,371.4644 m<sup>2</sup>/g  
t-Plot Micropore Area: 1,065.8769 m<sup>2</sup>/g

#### Pore Volume

t-Plot micropore volume: 0.406729 cm<sup>3</sup>/g

BJH Adsorption cumulative volume of pores  
between 1.7000 nm and 300.0000 nm diameter: 0.055673 cm<sup>3</sup>/g

BJH Desorption cumulative volume of pores  
between 1.7000 nm and 300.0000 nm diameter: 0.055517 cm<sup>3</sup>/g

#### Pore Size

BJH Adsorption average pore diameter (4V/A): 3.2932 nm

BJH Desorption average pore diameter (4V/A): 3.1216 nm

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**BJH Adsorption Pore Distribution Report**

Faas Correction

Harkins and Jura

$$t = [ 13.99 / ( 0.034 - \log(P/P_0) ) ] ^{0.5}$$

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 (cm <sup>3</sup> /g)	Cumulative Pore Volume (cm <sup>3</sup> /g)	Incremental Pore Area (m <sup>2</sup> /g)	Cumulative Pore Area (m <sup>2</sup> /g)
352.0 - 184.1	219.6	0.002583	0.002583	0.047	0.047
184.1 - 97.2	115.7	0.002452	0.005036	0.085	0.132
97.2 - 65.8	75.4	0.001624	0.006659	0.086	0.218
65.8 - 50.0	55.7	0.001280	0.007939	0.092	0.310
50.0 - 40.1	43.9	0.001186	0.009125	0.108	0.418
40.1 - 27.3	31.2	0.002185	0.011310	0.280	0.698
27.3 - 20.7	23.1	0.001698	0.013008	0.295	0.993
20.7 - 16.7	18.3	0.001472	0.014480	0.322	1.315
16.7 - 14.1	15.1	0.001106	0.015586	0.292	1.607
14.1 - 12.1	12.9	0.000891	0.016476	0.276	1.883
12.1 - 10.6	11.3	0.000750	0.017227	0.267	2.150
10.6 - 9.4	10.0	0.000537	0.017764	0.216	2.365
9.4 - 8.5	8.9	0.000533	0.018297	0.239	2.604
8.5 - 7.7	8.1	0.000359	0.018656	0.178	2.782
7.7 - 7.1	7.4	0.000277	0.018932	0.150	2.932
7.1 - 6.5	6.8	0.000348	0.019280	0.206	3.138
6.5 - 6.0	6.2	0.000298	0.019578	0.191	3.329
6.0 - 5.6	5.8	0.000357	0.019935	0.247	3.576
5.6 - 5.2	5.4	0.000313	0.020248	0.233	3.808
5.2 - 4.9	5.0	0.000364	0.020612	0.289	4.098
4.9 - 4.6	4.7	0.000383	0.020995	0.325	4.423
4.6 - 4.3	4.4	0.000599	0.021593	0.542	4.964
4.3 - 4.0	4.2	0.000518	0.022111	0.498	5.462
4.0 - 3.8	3.9	0.000478	0.022588	0.487	5.950
3.8 - 3.6	3.7	0.000769	0.023357	0.831	6.781
3.6 - 3.4	3.5	0.000700	0.024057	0.801	7.582
3.4 - 3.2	3.3	0.000921	0.024978	1.115	8.697
3.2 - 3.0	3.1	0.001015	0.025993	1.299	9.996
3.0 - 2.9	3.0	0.001146	0.027139	1.548	11.544
2.9 - 2.7	2.8	0.001310	0.028449	1.868	13.412
2.7 - 2.6	2.7	0.001497	0.029946	2.255	15.667
2.6 - 2.4	2.5	0.001743	0.031689	2.774	18.441
2.4 - 2.3	2.4	0.002107	0.033797	3.544	21.985
2.3 - 2.2	2.2	0.002601	0.036398	4.629	26.613
2.2 - 2.1	2.1	0.003042	0.039440	5.734	32.347
2.1 - 1.9	2.0	0.003783	0.043223	7.571	39.918

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1.9 - 1.8	1.9	0.005176	0.048399	11.043	50.961
1.8 - 1.7	1.7	0.007274	0.055673	16.661	67.622