micromeritics®

UES - UEDA ENVIRONMENTAL SOLUTIONS

Sample: KD-GA-M
Operator:
Submitter: s/n 212
File: C:\MicroActive for ASAP 2460\data\UCG-K...\KD-GA-M.SMP

Started:	2015/06/16 13:09:28	Analysis Adsorptive:	N2
Completed:	2015/06/16 19:53:40	Analysis Bath Temp.:	-195.800 °C
Report Time:	2015/06/18 9:14:22	Thermal Correction:	No
Sample Mass:	0.0880 g	Warm Free Space:	17.8952 cm³ Measured
Cold Free Space:	52.1118 cm³	Equilibration Interval:	10 s
Low Pressure Dose:	20.0000 cm³/g STP	Sample Density:	1.000 g/cm³
Automatic Degas:	No		

Summary Report

Surface Area

BET Surface Area: 1,335.2814 m²/g

Langmuir Surface Area: 1,552.1481 m²/g

t-Plot Micropore Area: 1,158.4055 m²/g

Pore Volume

t-Plot micropore volume: 0.441563 cm³/g

BJH Adsorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.075479 cm³/g

BJH Desorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.076417 cm³/g

Pore Size

BJH Adsorption average pore diameter (4V/A): 3.2153 nm

BJH Desorption average pore diameter (4V/A): 3.0829 nm

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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)
339.8 - 180.3	214.8	0.002117	0.002117	0.039	0.039
180.3 - 96.2	114.4	0.002028	0.004145	0.071	0.110
96.2 - 65.7	75.2	0.001295	0.005440	0.069	0.179
65.7 - 49.7	55.4	0.001093	0.006533	0.079	0.258
49.7 - 40.0	43.8	0.001031	0.007564	0.094	0.352
40.0 - 27.2	31.1	0.002156	0.009719	0.277	0.630
27.2 - 20.7	23.0	0.002090	0.011809	0.364	0.993
20.7 - 16.7	18.2	0.001885	0.013694	0.414	1.407
16.7 - 14.0	15.1	0.001642	0.015336	0.435	1.841
14.0 - 12.1	12.9	0.001477	0.016812	0.458	2.300
12.1 - 10.6	11.2	0.001309	0.018121	0.466	2.766
10.6 - 9.4	9.9	0.001125	0.019246	0.452	3.218
9.4 - 8.5	8.9	0.001040	0.020286	0.467	3.685
8.5 - 7.7	8.1	0.000970	0.021256	0.481	4.166
7.7 - 7.1	7.4	0.000945	0.022202	0.514	4.680
7.1 - 6.5	6.8	0.000879	0.023081	0.521	5.201
6.5 - 6.0	6.2	0.000877	0.023958	0.563	5.764
6.0 - 5.6	5.8	0.000817	0.024775	0.566	6.330
5.6 - 5.2	5.4	0.000886	0.025662	0.659	6.989
5.2 - 4.9	5.0	0.000916	0.026578	0.729	7.718
4.9 - 4.6	4.7	0.000854	0.027432	0.726	8.444
4.6 - 4.3	4.4	0.000893	0.028325	0.808	9.252
4.3 - 4.0	4.2	0.001042	0.029367	1.003	10.254
4.0 - 3.8	3.9	0.001130	0.030496	1.154	11.408
3.8 - 3.6	3.7	0.001202	0.031698	1.301	12.709
3.6 - 3.4	3.5	0.001273	0.032971	1.458	14.167
3.4 - 3.2	3.3	0.001441	0.034412	1.746	15.913
3.2 - 3.0	3.1	0.001560	0.035972	1.997	17.910
3.0 - 2.9	3.0	0.001759	0.037731	2.377	20.287
2.9 - 2.7	2.8	0.002018	0.039749	2.879	23.166
2.7 - 2.6	2.7	0.002254	0.042003	3.396	26.562
2.6 - 2.4	2.5	0.002541	0.044545	4.044	30.606
2.4 - 2.3	2.4	0.002967	0.047512	4.992	35.597
2.3 - 2.2	2.2	0.003376	0.050888	6.009	41.607
2.2 - 2.1	2.1	0.004026	0.054915	7.589	49.196
2.1 - 1.9	2.0	0.004897	0.059812	9.798	58.993

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1.9 - 1.8	1.9	0.006418	0.066229	13.696	72.690
1.8 - 1.7	1.7	0.009249	0.075479	21.210	93.900