micromeritics®

UES - UEDA ENVIRONMENTAL SOLUTIONS

Sample: KD-GW-A
Operator:
Submitter: s/n 212
File: C:\MicroActive for ASAP 2460\data\UCG-KD-GS\KD-GW.SMP

Started:	2015/06/16 13:06:29	Analysis Adsorptive:	N2
Completed:	2015/06/16 19:24:54	Analysis Bath Temp.:	-195.800 °C
Report Time:	2015/06/18 9:13:16	Thermal Correction:	No
Sample Mass:	0.0930 g	Warm Free Space:	17.4908 cm³ Measured
Cold Free Space:	50.4871 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: 1,329.2828 m²/g

Langmuir Surface Area: 1,547.0297 m²/g

t-Plot Micropore Area: 1,137.6410 m²/g

Pore Volume

t-Plot micropore volume: 0.435020 cm³/g

BJH Adsorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.075784 cm³/g

BJH Desorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.076781 cm³/g

Pore Size

BJH Adsorption average pore diameter (4V/A): 3.1260 nm

BJH Desorption average pore diameter (4V/A): 3.0049 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)
337.5 - 179.0	213.3	0.002241	0.002241	0.042	0.042
179.0 - 96.3	114.4	0.002346	0.004587	0.082	0.124
96.3 - 65.5	75.0	0.001617	0.006204	0.086	0.210
65.5 - 49.9	55.6	0.001291	0.007495	0.093	0.303
49.9 - 39.9	43.7	0.001235	0.008730	0.113	0.416
39.9 - 27.2	31.1	0.002492	0.011221	0.321	0.737
27.2 - 20.7	23.0	0.002027	0.013248	0.353	1.090
20.7 - 16.7	18.2	0.001747	0.014995	0.383	1.473
16.7 - 14.0	15.1	0.001417	0.016412	0.375	1.848
14.0 - 12.1	12.9	0.001276	0.017688	0.396	2.244
12.1 - 10.6	11.2	0.001092	0.018781	0.389	2.633
10.6 - 9.4	9.9	0.000990	0.019770	0.398	3.032
9.4 - 8.5	8.9	0.000863	0.020633	0.388	3.419
8.5 - 7.7	8.1	0.000794	0.021428	0.394	3.813
7.7 - 7.1	7.4	0.000733	0.022160	0.399	4.212
7.1 - 6.5	6.8	0.000686	0.022846	0.406	4.618
6.5 - 6.0	6.2	0.000602	0.023448	0.386	5.004
6.0 - 5.6	5.8	0.000692	0.024140	0.479	5.483
5.6 - 5.2	5.4	0.000686	0.024826	0.510	5.993
5.2 - 4.9	5.0	0.000730	0.025556	0.581	6.574
4.9 - 4.6	4.7	0.000689	0.026245	0.586	7.160
4.6 - 4.3	4.4	0.000792	0.027037	0.717	7.876
4.3 - 4.0	4.2	0.000938	0.027974	0.902	8.779
4.0 - 3.8	3.9	0.000970	0.028945	0.991	9.769
3.8 - 3.6	3.7	0.001002	0.029946	1.084	10.853
3.6 - 3.4	3.5	0.001149	0.031095	1.316	12.169
3.4 - 3.2	3.3	0.001336	0.032432	1.619	13.788
3.2 - 3.0	3.1	0.001448	0.033880	1.854	15.641
3.0 - 2.9	3.0	0.001588	0.035467	2.145	17.787
2.9 - 2.7	2.8	0.001865	0.037332	2.660	20.447
2.7 - 2.6	2.7	0.002243	0.039575	3.378	23.825
2.6 - 2.5	2.5	0.002533	0.042108	4.028	27.853
2.5 - 2.3	2.4	0.002909	0.045017	4.889	32.742
2.3 - 2.2	2.3	0.003462	0.048479	6.152	38.894
2.2 - 2.1	2.1	0.004177	0.052656	7.856	46.751
2.1 - 1.9	2.0	0.005174	0.057830	10.324	57.074

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1.9 - 1.8	1.9	0.007316	0.065145	15.567	72.641
1.8 - 1.7	1.7	0.010638	0.075784	24.331	96.972