micromeritics®

UES - UEDA ENVIRONMENTAL SOLUTIONS

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

Started:	2016/11/22 16:51:47	Analysis Adsorptive:	N2
Completed:	2016/11/22 23:17:12	Analysis Bath Temp.:	-195.800 °C
Report Time:	2016/11/24 5:33:25	Thermal Correction:	No
Sample Mass:	0.0983 g	Warm Free Space:	18.1571 cm³ Measured
Cold Free Space:	52.2760 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: 1,050.6636 m²/g

Langmuir Surface Area: 1,220.3352 m²/g

t-Plot Micropore Area: 900.6374 m²/g

Pore Volume

t-Plot micropore volume: 0.343491 cm³/g

BJH Adsorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.060708 cm³/g

BJH Desorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.057257 cm³/g

Pore Size

BJH Adsorption average pore diameter (4V/A): 3.2172 nm

BJH Desorption average pore diameter (4V/A): 3.0289 nm

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Equilibration Interval: 10 s
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)
339.1 - 183.4	218.1	0.002317	0.002317	0.042	0.042
183.4 - 96.4	114.7	0.002253	0.004570	0.079	0.121
96.4 - 65.9	75.4	0.001519	0.006089	0.081	0.202
65.9 - 49.9	55.6	0.001184	0.007273	0.085	0.287
49.9 - 40.1	43.9	0.001031	0.008305	0.094	0.381
40.1 - 27.2	31.2	0.001968	0.010273	0.253	0.633
27.2 - 20.7	23.0	0.001752	0.012025	0.305	0.938
20.7 - 16.7	18.3	0.001483	0.013509	0.325	1.263
16.7 - 14.0	15.1	0.001152	0.014661	0.305	1.568
14.0 - 12.1	12.9	0.000962	0.015623	0.298	1.866
12.1 - 10.6	11.2	0.000828	0.016451	0.295	2.161
10.6 - 9.4	9.9	0.000817	0.017268	0.328	2.489
9.4 - 8.5	8.9	0.000621	0.017889	0.279	2.768
8.5 - 7.7	8.1	0.000649	0.018538	0.322	3.090
7.7 - 7.1	7.4	0.000571	0.019109	0.310	3.400
7.1 - 6.5	6.8	0.000496	0.019605	0.294	3.694
6.5 - 6.0	6.2	0.000476	0.020081	0.305	3.999
6.0 - 5.6	5.8	0.000487	0.020568	0.337	4.336
5.6 - 5.2	5.4	0.000477	0.021045	0.355	4.690
5.2 - 4.9	5.0	0.000512	0.021557	0.407	5.098
4.9 - 4.6	4.7	0.000597	0.022153	0.507	5.605
4.6 - 4.3	4.4	0.000594	0.022748	0.538	6.142
4.3 - 4.0	4.2	0.000687	0.023435	0.661	6.804
4.0 - 3.8	3.9	0.000698	0.024133	0.713	7.517
3.8 - 3.6	3.7	0.000828	0.024962	0.896	8.413
3.6 - 3.4	3.5	0.000880	0.025842	1.008	9.421
3.4 - 3.2	3.3	0.001000	0.026842	1.211	10.632
3.2 - 3.0	3.1	0.001122	0.027964	1.436	12.068
3.0 - 2.9	3.0	0.001328	0.029293	1.795	13.863
2.9 - 2.7	2.8	0.001513	0.030805	2.158	16.020
2.7 - 2.6	2.7	0.001723	0.032528	2.595	18.615
2.6 - 2.4	2.5	0.002007	0.034536	3.194	21.810
2.4 - 2.3	2.4	0.002320	0.036855	3.901	25.711
2.3 - 2.2	2.2	0.002769	0.039624	4.927	30.638
2.2 - 2.1	2.1	0.003308	0.042932	6.232	36.869
2.1 - 1.9	2.0	0.004086	0.047018	8.167	45.036

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1.9 - 1.8	1.9	0.005631	0.052649	12.001	57.037
1.8 - 1.7	1.7	0.008059	0.060708	18.442	75.479