micromeritics®

UES - UEDA ENVIRONMENTAL SOLUTIONS

Sample: CTB
Operator:
Submitter: s/n 212
File: C:\MicroActive for ASAP 2460\data\UES\CTB (2).SMP

Started:	2015/06/15 11:10:30	Analysis Adsorptive:	N2
Completed:	2015/06/15 19:06:42	Analysis Bath Temp.:	-195.800 °C
Report Time:	2016/11/24 5:40:16	Thermal Correction:	No
Sample Mass:	0.0940 g	Warm Free Space:	17.3195 cm^3 Measured
Cold Free Space:	50.2843 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: 1,324.8850 m^2/g

Langmuir Surface Area: 1,563.3615 m^2/g

t-Plot Micropore Area: 1,112.2149 m^2/g

Pore Volume

t-Plot micropore volume: 0.424894 cm^3/g

BJH Adsorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.085740 cm^3/g

BJH Desorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.085183 cm^3/g

Pore Size

BJH Adsorption average pore diameter (4V/A): 3.1539 nm

BJH Desorption average pore diameter (4V/A): 3.0483 nm

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Sample Mass: 0.0940 g
Cold Free Space: 50.2843 cm³
Low Pressure Dose: 20.0000 cm³/g STP
Automatic Degas: No

Analysis Adsorptive: N2
Analysis Bath Temp.: -195.800 °C
Thermal Correction: No
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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)
358.3 - 181.4	216.9	0.001609	0.001609	0.030	0.030
181.4 - 96.0	114.2	0.001883	0.003492	0.066	0.096
96.0 - 65.8	75.2	0.001296	0.004788	0.069	0.165
65.8 - 49.6	55.3	0.001120	0.005908	0.081	0.246
49.6 - 39.9	43.6	0.001141	0.007049	0.105	0.350
39.9 - 27.1	31.0	0.002496	0.009545	0.323	0.673
27.1 - 20.6	22.9	0.002509	0.012054	0.438	1.111
20.6 - 16.7	18.2	0.002160	0.014214	0.475	1.586
16.7 - 14.0	15.1	0.001861	0.016075	0.493	2.079
14.0 - 12.1	12.9	0.001733	0.017808	0.539	2.618
12.1 - 10.6	11.2	0.001604	0.019412	0.572	3.190
10.6 - 9.4	9.9	0.001557	0.020969	0.627	3.817
9.4 - 8.5	8.9	0.001323	0.022292	0.594	4.411
8.5 - 7.7	8.1	0.001263	0.023555	0.627	5.038
7.7 - 7.1	7.4	0.001103	0.024658	0.600	5.638
7.1 - 6.5	6.7	0.001119	0.025777	0.663	6.302
6.5 - 6.0	6.2	0.001008	0.026785	0.647	6.949
6.0 - 5.6	5.8	0.000974	0.027759	0.674	7.623
5.6 - 5.2	5.4	0.000957	0.028715	0.712	8.334
5.2 - 4.9	5.0	0.000960	0.029675	0.764	9.099
4.9 - 4.6	4.7	0.000972	0.030647	0.827	9.925
4.6 - 4.3	4.4	0.000949	0.031596	0.859	10.784
4.3 - 4.0	4.2	0.001343	0.032939	1.293	12.077
4.0 - 3.8	3.9	0.001218	0.034157	1.244	13.321
3.8 - 3.6	3.7	0.001380	0.035537	1.494	14.815
3.6 - 3.4	3.5	0.001404	0.036941	1.609	16.424
3.4 - 3.2	3.3	0.001555	0.038496	1.884	18.308
3.2 - 3.0	3.1	0.001854	0.040350	2.374	20.682
3.0 - 2.9	3.0	0.001955	0.042305	2.643	23.325
2.9 - 2.7	2.8	0.002177	0.044482	3.106	26.431
2.7 - 2.6	2.7	0.002465	0.046946	3.714	30.144
2.6 - 2.4	2.5	0.002772	0.049718	4.412	34.556
2.4 - 2.3	2.4	0.003271	0.052989	5.503	40.059
2.3 - 2.2	2.2	0.003630	0.056619	6.458	46.517
2.2 - 2.1	2.1	0.004252	0.060871	8.005	54.522
2.1 - 1.9	2.0	0.005404	0.066275	10.796	65.318

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1.9 - 1.8	1.9	0.007713	0.073988	16.450	81.768
1.8 - 1.7	1.7	0.011752	0.085740	26.972	108.740