micromeritics®

UES - UEDA ENVIRONMENTAL SOLUTIONS

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

Started:	2015/06/15 8:26:37	Analysis Adsorptive:	N2
Completed:	2015/06/15 15:28:54	Analysis Bath Temp.:	-195.800 °C
Report Time:	2016/11/24 5:39:38	Thermal Correction:	No
Sample Mass:	0.0870 g	Warm Free Space:	17.5007 cm³ Measured
Cold Free Space:	50.9419 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: 1,203.2530 m²/g

Langmuir Surface Area: 1,370.7304 m²/g

t-Plot Micropore Area: 1,059.8891 m²/g

Pore Volume

t-Plot micropore volume: 0.403091 cm³/g

BJH Adsorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.053803 cm³/g

BJH Desorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.050624 cm³/g

Pore Size

BJH Adsorption average pore diameter (4V/A): 3.0427 nm

BJH Desorption average pore diameter (4V/A): 2.8349 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)
350.9 - 185.8	221.4	0.001310	0.001310	0.024	0.024
185.8 - 96.0	114.4	0.001552	0.002863	0.054	0.078
96.0 - 65.4	74.9	0.001248	0.004111	0.067	0.145
65.4 - 49.5	55.2	0.001086	0.005197	0.079	0.223
49.5 - 40.1	43.8	0.000945	0.006142	0.086	0.310
40.1 - 27.1	31.0	0.001706	0.007848	0.220	0.530
27.1 - 20.6	22.9	0.001684	0.009532	0.294	0.823
20.6 - 16.7	18.2	0.001262	0.010794	0.277	1.100
16.7 - 14.0	15.1	0.000981	0.011775	0.260	1.360
14.0 - 12.1	12.9	0.000908	0.012683	0.282	1.642
12.1 - 10.6	11.2	0.000619	0.013302	0.221	1.862
10.6 - 9.4	9.9	0.000663	0.013965	0.267	2.129
9.4 - 8.5	8.9	0.000570	0.014535	0.256	2.385
8.5 - 7.7	8.1	0.000362	0.014897	0.180	2.565
7.7 - 7.1	7.4	0.000403	0.015300	0.219	2.784
7.1 - 6.5	6.8	0.000364	0.015664	0.216	3.000
6.5 - 6.0	6.2	0.000394	0.016058	0.253	3.253
6.0 - 5.6	5.8	0.000361	0.016419	0.250	3.502
5.6 - 5.2	5.4	0.000315	0.016733	0.234	3.736
5.2 - 4.9	5.0	0.000416	0.017149	0.331	4.067
4.9 - 4.6	4.7	0.000441	0.017590	0.375	4.442
4.6 - 4.3	4.4	0.000451	0.018041	0.408	4.850
4.3 - 4.0	4.2	0.000496	0.018538	0.478	5.328
4.0 - 3.8	3.9	0.000611	0.019149	0.624	5.952
3.8 - 3.6	3.7	0.000731	0.019879	0.791	6.743
3.6 - 3.4	3.5	0.000740	0.020620	0.848	7.591
3.4 - 3.2	3.3	0.000963	0.021583	1.167	8.758
3.2 - 3.0	3.1	0.000952	0.022535	1.218	9.976
3.0 - 2.9	3.0	0.001268	0.023802	1.714	11.690
2.9 - 2.7	2.8	0.001391	0.025194	1.987	13.677
2.7 - 2.6	2.7	0.001555	0.026749	2.344	16.021
2.6 - 2.4	2.5	0.001868	0.028617	2.973	18.994
2.4 - 2.3	2.4	0.002194	0.030811	3.690	22.684
2.3 - 2.2	2.2	0.002686	0.033498	4.780	27.464
2.2 - 2.1	2.1	0.003144	0.036642	5.923	33.387
2.1 - 1.9	2.0	0.003962	0.040604	7.927	41.313

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1.9 - 1.8	1.9	0.005111	0.045715	10.901	52.214
1.8 - 1.7	1.7	0.008088	0.053803	18.517	70.731