

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

Started: 2015/06/19 12:06:52	Analysis Adsorptive: N2
Completed: 2015/06/19 18:13:17	Analysis Bath Temp.: -195.800 °C
Report Time: 2015/06/22 7:37:57	Thermal Correction: No
Sample Mass: 0.0930 g	Warm Free Space: 17.8012 cm ³ Measured
Cold Free Space: 52.2290 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: 1,079.2020 m²/g
Langmuir Surface Area: 1,237.1431 m²/g
t-Plot Micropore Area: 950.7257 m²/g

Pore Volume

t-Plot micropore volume: 0.362654 cm³/g
BJH Adsorption cumulative volume of pores
between 1.7000 nm and 300.0000 nm diameter: 0.051179 cm³/g
BJH Desorption cumulative volume of pores
between 1.7000 nm and 300.0000 nm diameter: 0.051347 cm³/g

Pore Size

BJH Adsorption average pore diameter (4V/A): 3.1551 nm
BJH Desorption average pore diameter (4V/A): 2.9502 nm

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BJH Adsorption Pore Distribution Report

Faas Correction

Harkins and Jura

$$t = [13.99 / (0.034 - \log(P/P_0))] ^{0.5}$$

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 (cm ³ /g)	Cumulative Pore Volume (cm ³ /g)	Incremental Pore Area (m ² /g)	Cumulative Pore Area (m ² /g)
352.3 - 185.7	221.3	0.001749	0.001749	0.032	0.032
185.7 - 97.1	115.6	0.001649	0.003399	0.057	0.089
97.1 - 66.1	75.7	0.001102	0.004500	0.058	0.147
66.1 - 49.9	55.7	0.000894	0.005394	0.064	0.211
49.9 - 40.2	43.9	0.000829	0.006224	0.075	0.287
40.2 - 27.3	31.2	0.001548	0.007772	0.199	0.485
27.3 - 20.7	23.0	0.001420	0.009192	0.247	0.732
20.7 - 16.7	18.2	0.001231	0.010423	0.270	1.002
16.7 - 14.0	15.1	0.001006	0.011429	0.266	1.268
14.0 - 12.1	12.9	0.000869	0.012298	0.270	1.537
12.1 - 10.6	11.2	0.000807	0.013105	0.287	1.825
10.6 - 9.4	9.9	0.000718	0.013823	0.289	2.114
9.4 - 8.5	8.9	0.000553	0.014376	0.248	2.362
8.5 - 7.7	8.1	0.000548	0.014924	0.272	2.633
7.7 - 7.1	7.4	0.000554	0.015478	0.301	2.934
7.1 - 6.5	6.8	0.000396	0.015874	0.235	3.169
6.5 - 6.0	6.2	0.000463	0.016337	0.297	3.466
6.0 - 5.6	5.8	0.000396	0.016733	0.274	3.740
5.6 - 5.2	5.4	0.000439	0.017172	0.326	4.066
5.2 - 4.9	5.0	0.000383	0.017555	0.305	4.371
4.9 - 4.6	4.7	0.000495	0.018050	0.421	4.792
4.6 - 4.3	4.4	0.000533	0.018583	0.482	5.274
4.3 - 4.0	4.2	0.000585	0.019168	0.562	5.836
4.0 - 3.8	3.9	0.000593	0.019761	0.606	6.442
3.8 - 3.6	3.7	0.000665	0.020426	0.720	7.162
3.6 - 3.4	3.5	0.000712	0.021138	0.815	7.977
3.4 - 3.2	3.3	0.000820	0.021958	0.992	8.969
3.2 - 3.0	3.1	0.000981	0.022938	1.255	10.224
3.0 - 2.9	3.0	0.001100	0.024038	1.486	11.710
2.9 - 2.7	2.8	0.001327	0.025365	1.893	13.604
2.7 - 2.6	2.7	0.001417	0.026782	2.135	15.738
2.6 - 2.4	2.5	0.001756	0.028539	2.794	18.532
2.4 - 2.3	2.4	0.001993	0.030531	3.351	21.883
2.3 - 2.2	2.2	0.002384	0.032915	4.239	26.123
2.2 - 2.1	2.1	0.002949	0.035864	5.554	31.677
2.1 - 1.9	2.0	0.003622	0.039486	7.240	38.917

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1.9 - 1.8	1.9	0.004838	0.044324	10.303	49.219
1.8 - 1.7	1.8	0.006855	0.051179	15.666	64.885