

Sample: Activated Carbon c1003 Nitrogen Analysis
Operator: W.S
Submitter: s/n 212
File: C:\MicroActive for ASAP 2460\data\UES\VFK.SMP

Started: 2016/09/16 8:49:25	Analysis Adsorptive: N2
Completed: 2016/09/16 15:19:01	Analysis Bath Temp.: -195.800 °C
Report Time: 2016/11/24 15:59:25	Thermal Correction: No
Sample Mass: 0.0870 g	Warm Free Space: 17.8883 cm ³ Measured
Cold Free Space: 52.5195 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: 1,114.0462 m²/g
Langmuir Surface Area: 1,309.4125 m²/g
t-Plot Micropore Area: 953.0085 m²/g

Pore Volume

t-Plot micropore volume: 0.364301 cm³/g
BJH Adsorption cumulative volume of pores
between 1.7000 nm and 300.0000 nm diameter: 0.076973 cm³/g
BJH Desorption cumulative volume of pores
between 1.7000 nm and 300.0000 nm diameter: 0.074422 cm³/g

Pore Size

BJH Adsorption average pore diameter (4V/A): 3.7345 nm
BJH Desorption average pore diameter (4V/A): 3.5626 nm

Sample: Activated Carbon c1003 Nitrogen Analysis
Operator: W.S
Submitter: s/n 212
File: C:\MicroActive for ASAP 2460\data\UES\VKF.SMP

Started: 2016/09/16 8:49:25	Analysis Adsorptive: N2
Completed: 2016/09/16 15:19:01	Analysis Bath Temp.: -195.800 °C
Report Time: 2016/11/24 15:59:25	Thermal Correction: No
Sample Mass: 0.0870 g	Warm Free Space: 17.8883 cm ³ Measured
Cold Free Space: 52.5195 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	

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)
321.9 - 170.3	202.9	0.004891	0.004891	0.096	0.096
170.3 - 94.7	112.1	0.004905	0.009796	0.175	0.271
94.7 - 65.6	74.9	0.003086	0.012882	0.165	0.436
65.6 - 49.8	55.5	0.002321	0.015203	0.167	0.603
49.8 - 39.8	43.7	0.002033	0.017236	0.186	0.790
39.8 - 27.2	31.1	0.003259	0.020496	0.420	1.210
27.2 - 20.7	23.0	0.002425	0.022921	0.422	1.631
20.7 - 16.7	18.2	0.001847	0.024767	0.405	2.036
16.7 - 14.0	15.1	0.001505	0.026272	0.398	2.434
14.0 - 12.1	12.9	0.001204	0.027476	0.374	2.808
12.1 - 10.6	11.2	0.001036	0.028513	0.369	3.177
10.6 - 9.4	9.9	0.000895	0.029408	0.360	3.537
9.4 - 8.5	8.9	0.000839	0.030248	0.377	3.914
8.5 - 7.7	8.1	0.000714	0.030961	0.354	4.268
7.7 - 7.1	7.4	0.000697	0.031658	0.379	4.646
7.1 - 6.5	6.8	0.000650	0.032308	0.385	5.031
6.5 - 6.0	6.2	0.000646	0.032954	0.415	5.446
6.0 - 5.6	5.8	0.000646	0.033600	0.447	5.892
5.6 - 5.2	5.4	0.000558	0.034158	0.415	6.307
5.2 - 4.9	5.0	0.000590	0.034749	0.470	6.777
4.9 - 4.6	4.7	0.000655	0.035404	0.556	7.333
4.6 - 4.3	4.4	0.000732	0.036135	0.662	7.996
4.3 - 4.0	4.2	0.000745	0.036881	0.717	8.713
4.0 - 3.8	3.9	0.000845	0.037726	0.863	9.575
3.8 - 3.6	3.7	0.000926	0.038652	1.002	10.577
3.6 - 3.4	3.5	0.000956	0.039608	1.095	11.672
3.4 - 3.2	3.3	0.001101	0.040709	1.334	13.006
3.2 - 3.0	3.1	0.001267	0.041976	1.621	14.627
3.0 - 2.9	3.0	0.001361	0.043337	1.839	16.466
2.9 - 2.7	2.8	0.001565	0.044901	2.232	18.698
2.7 - 2.6	2.7	0.001909	0.046811	2.876	21.573
2.6 - 2.4	2.5	0.002120	0.048931	3.373	24.947
2.4 - 2.3	2.4	0.002466	0.051397	4.147	29.094
2.3 - 2.2	2.2	0.002968	0.054365	5.279	34.373
2.2 - 2.1	2.1	0.003519	0.057884	6.626	40.999
2.1 - 1.9	2.0	0.004466	0.062350	8.925	49.925

Sample: Activated Carbon c1003 Nitrogen Analysis
 Operator: W.S
 Submitter: s/n 212
 File: C:\MicroActive for ASAP 2460\data\UES\VFK.SMP

Started: 2016/09/16 8:49:25	Analysis Adsorptive: N2
Completed: 2016/09/16 15:19:01	Analysis Bath Temp.: -195.800 °C
Report Time: 2016/11/24 15:59:25	Thermal Correction: No
Sample Mass: 0.0870 g	Warm Free Space: 17.8883 cm ³ Measured
Cold Free Space: 52.5195 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	

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)
1.9 - 1.8	1.9	0.005923	0.068273	12.618	62.543
1.8 - 1.7	1.7	0.008700	0.076973	19.903	82.445