micromeritics®

UES - UEDA ENVIRONMENTAL SOLUTIONS

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

Started:	2016/10/28 17:57:04	Analysis Adsorptive:	N2
Completed:	2016/10/29 0:24:26	Analysis Bath Temp.:	-195.800 °C
Report Time:	2016/11/24 17:30:39	Thermal Correction:	No
Sample Mass:	0.0205 g	Warm Free Space:	18.0669 cm^3 Measured
Cold Free Space:	52.3762 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: 1,354.5129 m^2/g

Langmuir Surface Area: 1,945.2742 m^2/g

t-Plot Micropore Area: 1,023.8927 m^2/g

Pore Volume

t-Plot micropore volume: 0.402131 cm^3/g

BJH Adsorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.485647 cm^3/g

BJH Desorption cumulative volume of pores between 1.7000 nm and 300.0000 nm diameter: 0.477297 cm^3/g

Pore Size

BJH Adsorption average pore diameter (4V/A): 10.8044 nm

BJH Desorption average pore diameter (4V/A): 10.9707 nm

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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)
183.4 - 122.1	140.7	0.121307	0.121307	3.448	3.448
122.1 - 84.5	96.5	0.081297	0.202603	3.370	6.818
84.5 - 62.8	70.4	0.049480	0.252083	2.811	9.629
62.8 - 48.9	54.1	0.032389	0.284472	2.396	12.024
48.9 - 38.6	42.5	0.025344	0.309816	2.384	14.408
38.6 - 26.9	30.6	0.031483	0.341300	4.113	18.521
26.9 - 20.6	22.9	0.018952	0.360252	3.317	21.838
20.6 - 16.7	18.2	0.012190	0.372442	2.679	24.518
16.7 - 14.0	15.1	0.008613	0.381055	2.283	26.801
14.0 - 12.1	12.9	0.006194	0.387249	1.924	28.725
12.1 - 10.6	11.2	0.004812	0.392061	1.714	30.439
10.6 - 9.4	9.9	0.003820	0.395881	1.537	31.976
9.4 - 8.5	8.9	0.003351	0.399232	1.504	33.480
8.5 - 7.7	8.1	0.002243	0.401475	1.112	34.592
7.7 - 7.1	7.4	0.001935	0.403411	1.052	35.644
7.1 - 6.5	6.8	0.001495	0.404906	0.885	36.530
6.5 - 6.0	6.2	0.001284	0.406190	0.824	37.353
6.0 - 5.6	5.8	0.001166	0.407357	0.807	38.160
5.6 - 5.2	5.4	0.001227	0.408584	0.912	39.072
5.2 - 4.9	5.0	0.000935	0.409519	0.744	39.816
4.9 - 4.6	4.7	0.001011	0.410530	0.859	40.675
4.6 - 4.3	4.4	0.000788	0.411318	0.713	41.388
4.3 - 4.0	4.2	0.001067	0.412385	1.026	42.414
4.0 - 3.8	3.9	0.001209	0.413594	1.234	43.648
3.8 - 3.6	3.7	0.001233	0.414826	1.334	44.982
3.6 - 3.4	3.5	0.001480	0.416307	1.695	46.677
3.4 - 3.2	3.3	0.001573	0.417879	1.904	48.581
3.2 - 3.0	3.1	0.001901	0.419781	2.433	51.014
3.0 - 2.9	3.0	0.002491	0.422272	3.366	54.380
2.9 - 2.7	2.8	0.002868	0.425140	4.092	58.471
2.7 - 2.6	2.7	0.003120	0.428259	4.701	63.172
2.6 - 2.4	2.5	0.003464	0.431723	5.513	68.685
2.4 - 2.3	2.4	0.004529	0.436252	7.620	76.306
2.3 - 2.2	2.2	0.005347	0.441599	9.521	85.827
2.2 - 2.1	2.1	0.006677	0.448276	12.601	98.428
2.1 - 1.9	2.0	0.008556	0.456832	17.149	115.577

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1.9 - 1.8	1.9	0.011722	0.468554	25.047	140.624
1.8 - 1.7	1.7	0.017093	0.485647	39.173	179.797