

Sample: 2106031355/ne-2
Operator: xu
Submitter:
File: D:\实验室\3020数据\指南针\2106031355\NE2.SMP

Started: 2021/6/4 18:21:57	Analysis Adsorptive: N2
Completed: 2021/6/4 23:31:24	Analysis Bath Temp.: -195.800 °C
Report Time: 2021/6/6 18:31:50	Thermal Correction: No
Sample Mass: 0.1399 g	Warm Free Space: 10.2433 cm ³ Measured
Cold Free Space: 30.4556 cm ³	Equilibration Interval: 5 s
Low Pressure Dose: None	Sample Density: 1.000 g/cm ³
Automatic Degas: No	

Summary Report

Surface Area

Single point surface area at $p/p^\circ = 0.296164089$: 150.8019 m²/g

BET Surface Area: 153.2261 m²/g

BJH Adsorption cumulative surface area of pores
between 1.7000 nm and 300.0000 nm diameter: 157.098 m²/g

BJH Desorption cumulative surface area of pores
between 1.7000 nm and 300.0000 nm diameter: 167.3484 m²/g

Pore Volume

BJH Adsorption cumulative volume of pores
between 1.7000 nm and 300.0000 nm diameter: 0.510020 cm³/g

BJH Desorption cumulative volume of pores
between 1.7000 nm and 300.0000 nm diameter: 0.514207 cm³/g

Pore Size

BJH Adsorption average pore diameter (4V/A): 12.9860 nm

BJH Desorption average pore diameter (4V/A): 12.2907 nm

D-H Adsorption average pore diameter (4V/A): 13.0683 nm

D-H Desorption average pore diameter (4V/A): 12.4803 nm



Silica Alumina Reference Material

TriStar II 3020 3.02

TriStar II 3020 Version 3.02
Serial # 2183 Unit 1 Port 1

Page 2

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Equilibration Interval: 5 s
Sample Density: 1.000 g/cm³

Isotherm Tabular Report

Relative Pressure (p/p°)	Absolute Pressure (mmHg)	Quantity Adsorbed (cm ³ /g STP)	Elapsed Time (h:min)	Saturation Pressure (mmHg)
0.009544863	7.174792	28.1397	00:33	751.393738
0.032238129	24.234396	31.2885	00:45	751.691406
0.061829399	46.481598	33.4653	00:48	751.730835
0.078537564	59.029205	34.5129	00:50	751.771790
0.099439533	74.744583	35.7595	00:52	751.604736
0.119354114	89.718933	36.9342	00:54	751.658630
0.139219644	104.660568	38.1194	00:55	751.703735
0.159089424	119.599960	39.3372	00:57	751.765808
0.178921346	134.504395	40.6002	00:59	751.778198
0.198753770	149.429184	41.9067	01:01	751.751526
0.244555783	183.869125	41.9067	01:03	751.830688
0.296164089	222.686111	45.1511	01:06	751.849426
0.346431834	260.494263	49.2254	01:08	751.901123
0.398457785	299.639160	53.4683	01:10	751.935120
0.447966417	336.890869	57.8658	01:13	751.997253
0.497465108	374.125916	61.9870	01:15	752.044922
0.547105053	411.452820	66.1479	01:18	752.064636
0.596854283	448.883636	70.5428	01:20	752.054504
0.646426708	486.176880	75.3255	01:23	752.082458
0.695986354	523.486450	80.6440	01:26	752.098999
0.744984189	560.371887	86.6906	01:29	752.150452
0.793862160	597.207764	93.7301	01:33	752.192993
0.848748998	638.525879	102.3011	01:36	752.281433
0.895550914	673.897034	115.8118	01:43	752.314148
0.945496040	711.633850	135.2424	01:50	752.494385
0.976254250	735.069458	177.0531	02:00	752.656616
0.983308342	740.587524	257.8795	02:17	752.948792
0.978309042	736.841125	315.4416	02:35	753.158997
0.956023009	720.276978	310.5558	02:37	753.178284
0.905766879	682.454102	248.3552	02:54	753.409668
0.843207640	635.422729	156.6888	03:18	753.454468
0.804983397	606.691528	122.3168	03:28	753.578003
0.749267926	564.747620	109.3958	03:34	753.669617
0.692447462	521.931091	97.0590	03:40	753.732544
0.639725254	482.212433	88.6838	03:44	753.748291
0.604716666	455.831909	82.7466	03:48	753.780518
0.553437953	417.187805	79.3979	03:51	753.794189
0.502695497	378.947968	75.0017	03:53	753.811340
0.451223008	340.202484	70.9855	03:56	753.832031
0.401977317	303.080200	64.7003	04:02	753.956421
0.350776738	264.470245	58.7962	04:06	753.973389
		54.2370	04:08	753.956055

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Equilibration Interval: 5 s
Sample Density: 1.000 g/cm³

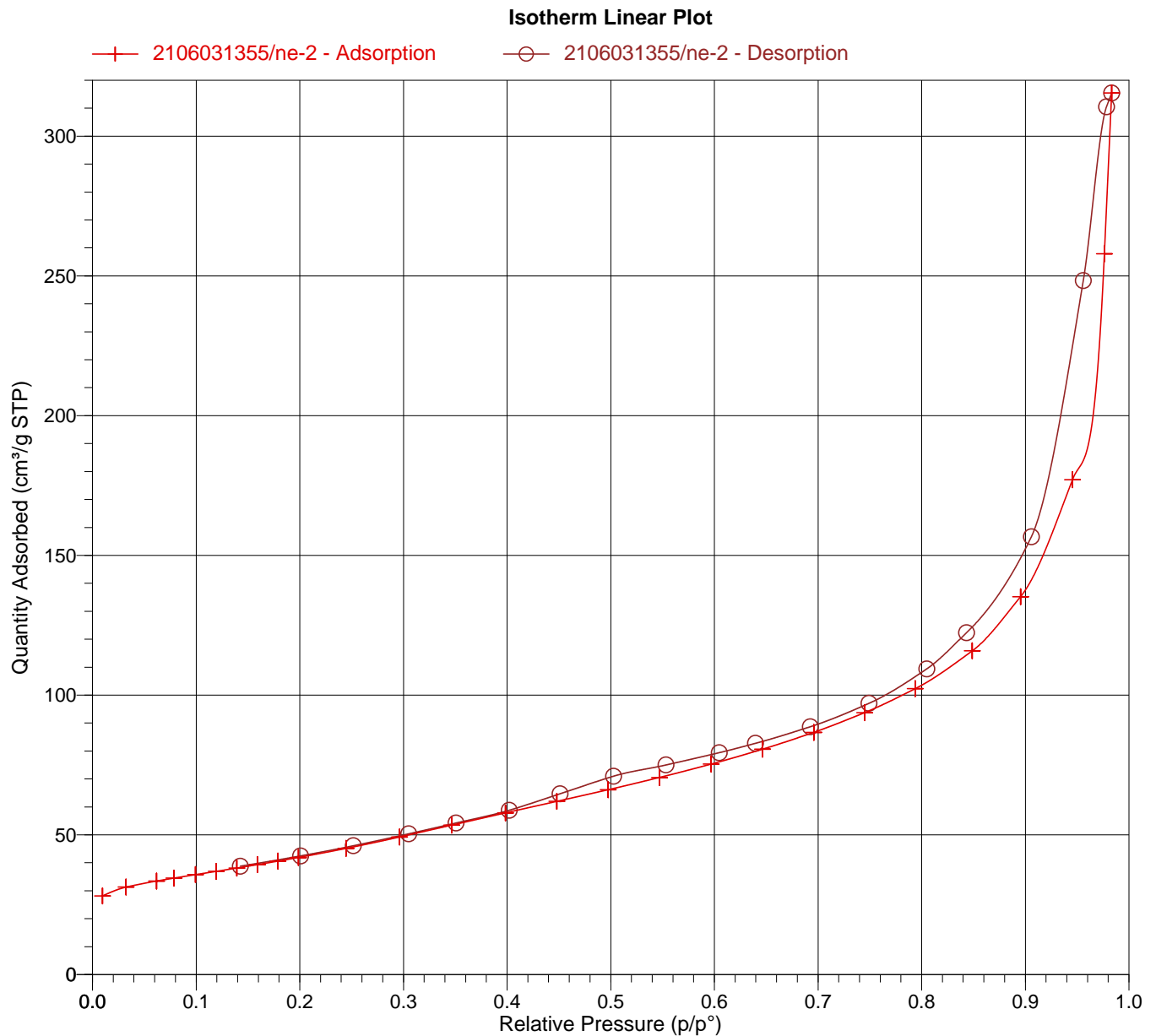
Isotherm Tabular Report

Relative Pressure (p/p°)	Absolute Pressure (mmHg)	Quantity Adsorbed (cm ³ /g STP)	Elapsed Time (h:min)	Saturation Pressure (mmHg)
0.305184245	230.110504	50.3619	04:11	754.005188
0.251704472	189.787399	46.0876	04:13	754.008850
0.200901555	151.494156	42.4703	04:15	754.071594
0.142723446	107.622276	38.7893	04:18	754.061646

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Low Pressure Dose: None
Automatic Degas: No

Analysis Adsorptive: N₂
Analysis Bath Temp.: -195.800 °C
Thermal Correction: No
Warm Free Space: 10.2433 cm³ Measured
Equilibration Interval: 5 s
Sample Density: 1.000 g/cm³





Silica Alumina Reference Material

TriStar II 3020 3.02

TriStar II 3020 Version 3.02
Serial # 2183 Unit 1 Port 1

Page 5

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Low Pressure Dose: None	Sample Density: 1.000 g/cm ³
Automatic Degas: No	

BET Report

BET Surface Area: 153.2261 ± 1.1312 m²/g
Slope: 0.028111 ± 0.000207 g/cm³ STP
Y-Intercept: 0.000295 ± 0.000036 g/cm³ STP
C: 96.161378
Qm: 35.2035 cm³/g STP
Correlation Coefficient: 0.9997839
Molecular Cross-Sectional Area: 0.1620 nm²

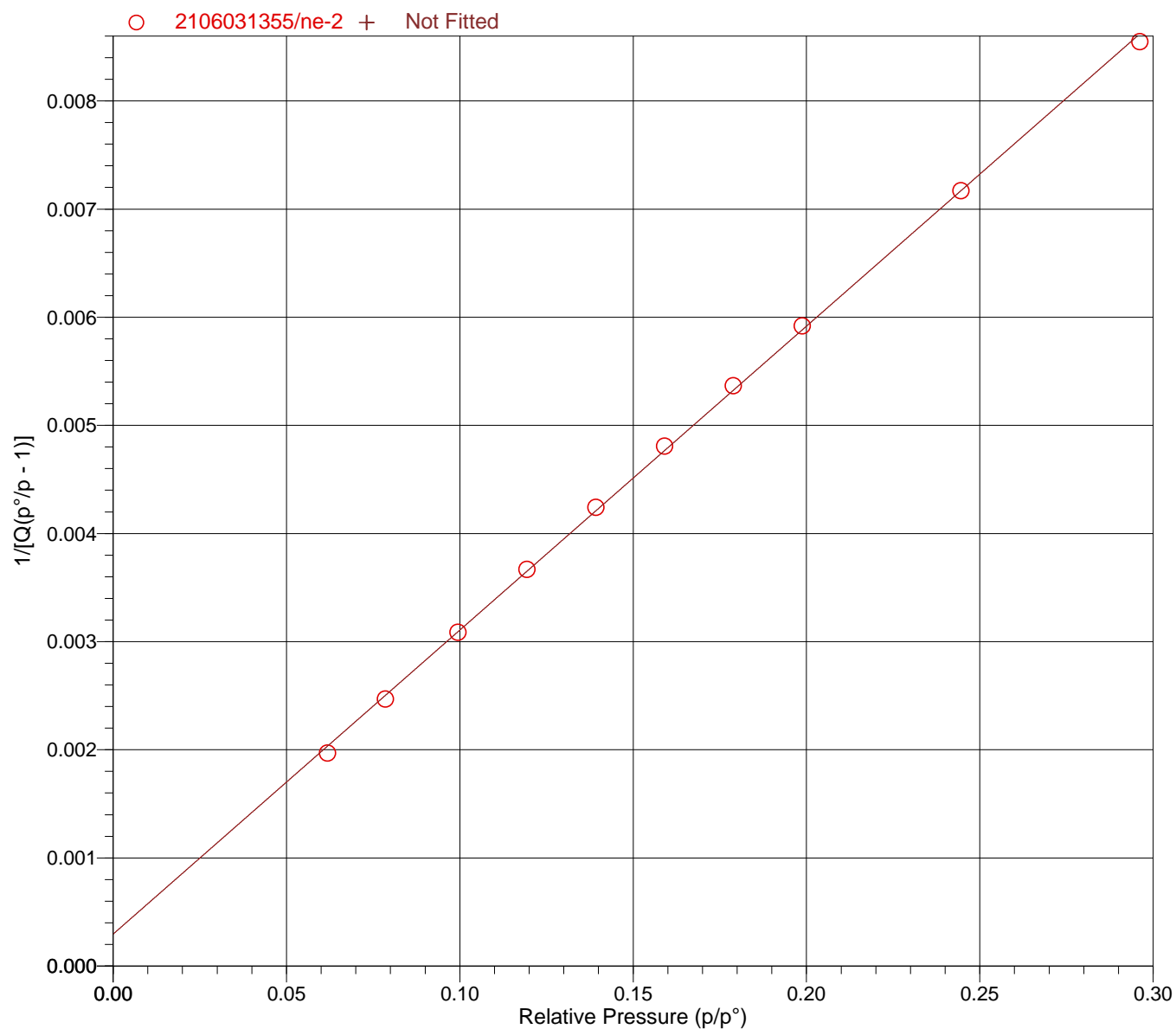
Relative Pressure (p/p °)	Quantity Adsorbed (cm ³ /g STP)	1/[Q(p°/p - 1)]
0.061829399	33.4653	0.001969
0.078537564	34.5129	0.002470
0.099439533	35.7595	0.003088
0.119354114	36.9342	0.003670
0.139219644	38.1194	0.004243
0.159089424	39.3372	0.004809
0.178921346	40.6002	0.005367
0.198753770	41.9067	0.005919
0.244555783	45.1511	0.007170
0.296164089	49.2254	0.008548

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BET Surface Area Plot





Silica Alumina Reference Material

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Page 7

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BJH Adsorption Pore Distribution Report

Standard

User-Defined

Reference Curve: SIO2OH.THK

Diameter Range: 1.7000 nm to 300.0000 nm

Adsorbate Property Factor: 0.95300 nm

Density Conversion Factor: 0.0015500

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)
119.3 - 84.7	96.2	0.100771	0.100771	4.192	4.192
84.7 - 36.7	44.4	0.140122	0.240892	12.633	16.825
36.7 - 20.0	23.4	0.082787	0.323679	14.130	30.955
20.0 - 14.1	15.9	0.037454	0.361132	9.407	40.362
14.1 - 10.5	11.7	0.026427	0.387560	9.035	49.397
10.5 - 8.6	9.3	0.016772	0.404332	7.215	56.611
8.6 - 7.2	7.8	0.014023	0.418355	7.236	63.847
7.2 - 6.2	6.6	0.012322	0.430677	7.438	71.286
6.2 - 5.4	5.8	0.010872	0.441549	7.543	78.829
5.4 - 4.8	5.1	0.009893	0.451443	7.785	86.614
4.8 - 4.3	4.5	0.009046	0.460488	7.994	94.608
4.3 - 3.9	4.1	0.008671	0.469159	8.544	103.152
3.9 - 3.5	3.7	0.008955	0.478114	9.788	112.940
3.5 - 3.1	3.3	0.009980	0.488094	12.101	125.042
3.1 - 2.8	3.0	0.009596	0.497690	12.892	137.933
2.8 - 2.6	2.7	0.007842	0.505532	11.691	149.625
2.6 - 2.3	2.4	0.003917	0.509449	6.465	156.089
2.3 - 2.2	2.3	0.000571	0.510020	1.008	157.098

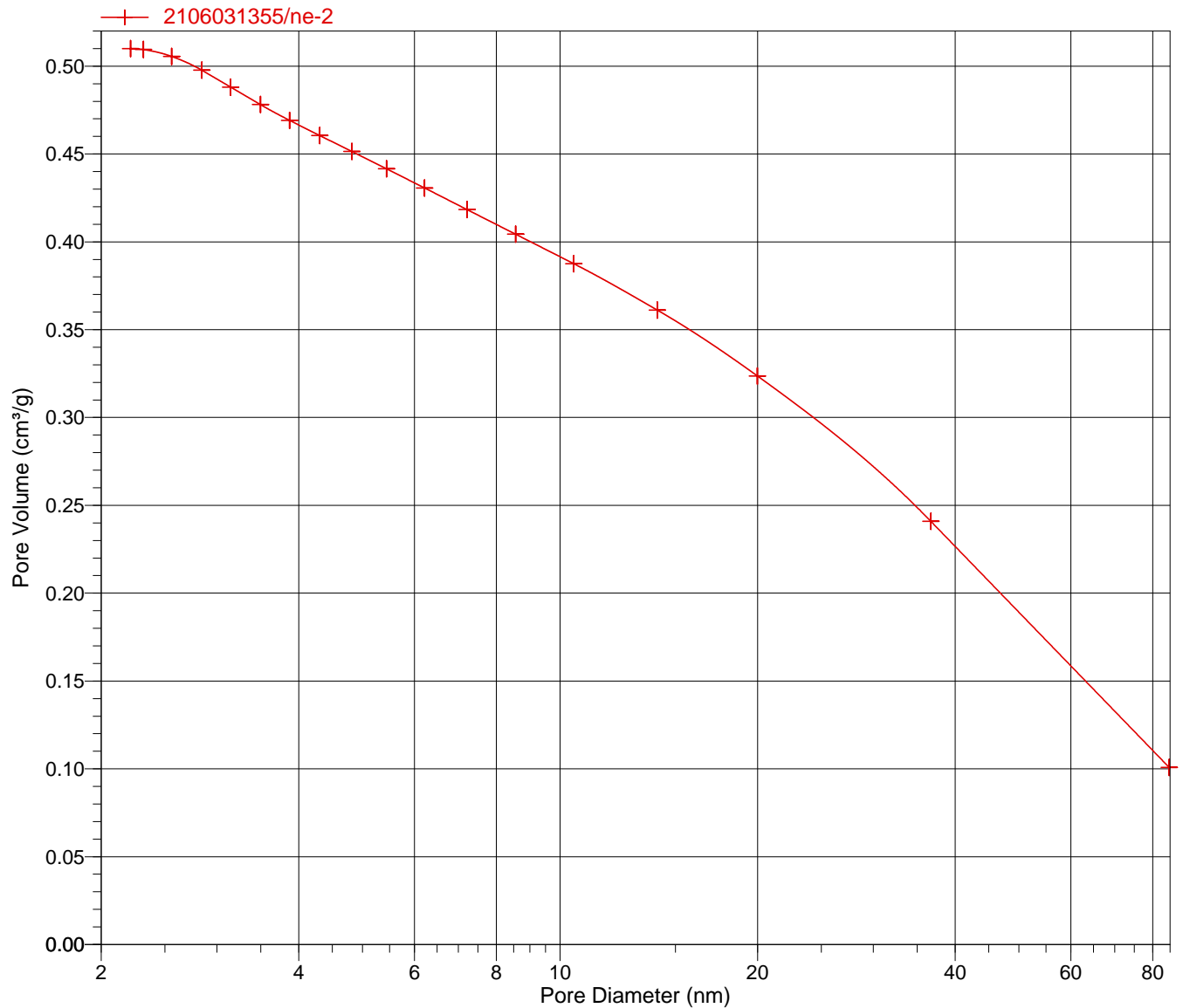
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Thermal Correction: No
Warm Free Space: 10.2433 cm³ Measured
Equilibration Interval: 5 s
Sample Density: 1.000 g/cm³

BJH Adsorption Cumulative Pore Volume (Larger)

User-Defined : Standard



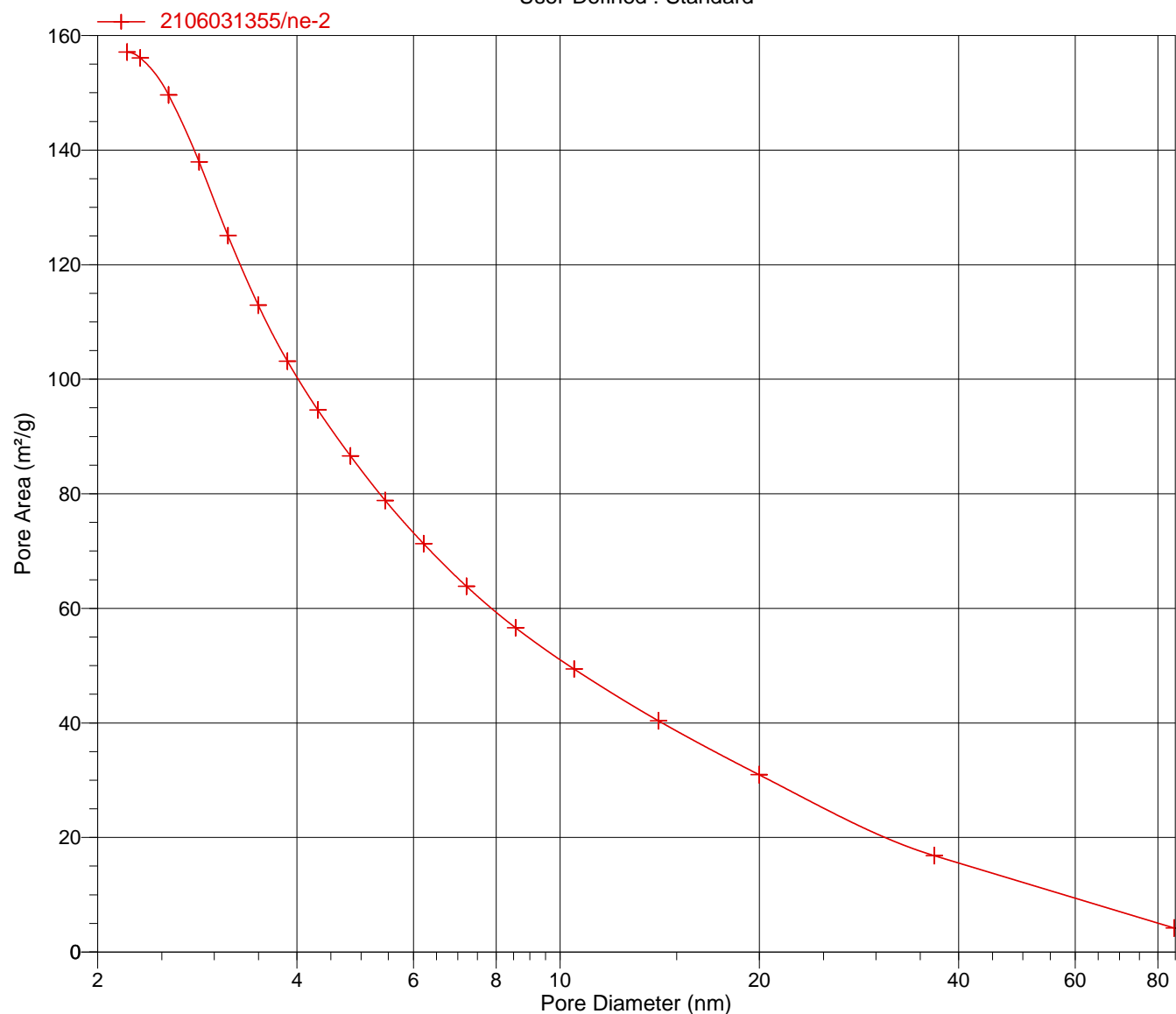
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Automatic Degas: No

Analysis Adsorptive: N₂
Analysis Bath Temp.: -195.800 °C
Thermal Correction: No
Warm Free Space: 10.2433 cm³ Measured
Equilibration Interval: 5 s
Sample Density: 1.000 g/cm³

BJH Adsorption Cumulative Pore Area (Larger)

User-Defined : Standard



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Low Pressure Dose: None

Automatic Degas: No

Analysis Adsorptive: N2

Analysis Bath Temp.: -195.800 °C

Thermal Correction: No

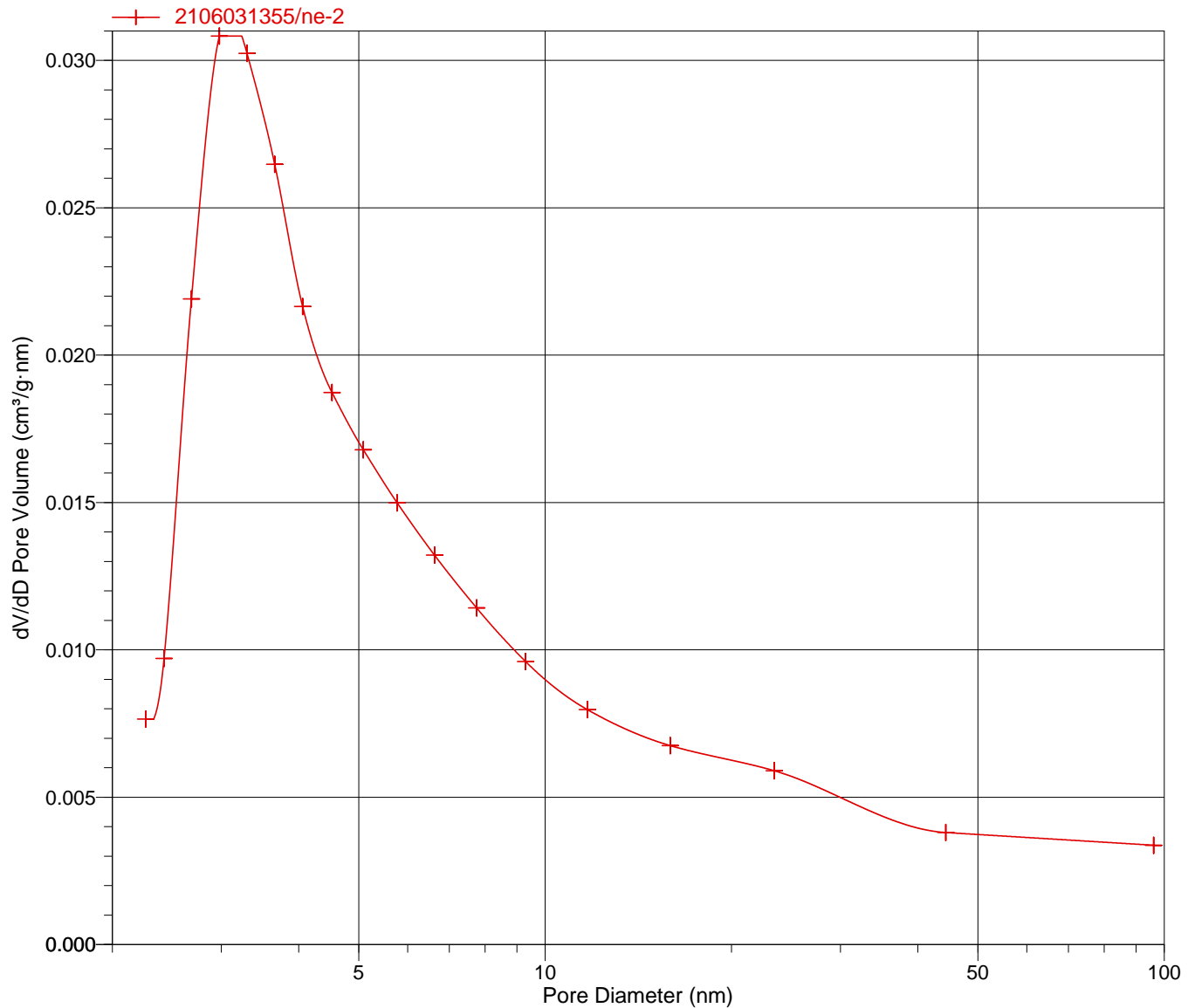
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Equilibration Interval: 5 s

Sample Density: 1.000 g/cm³

BJH Adsorption dV/dD Pore Volume

User-Defined : Standard



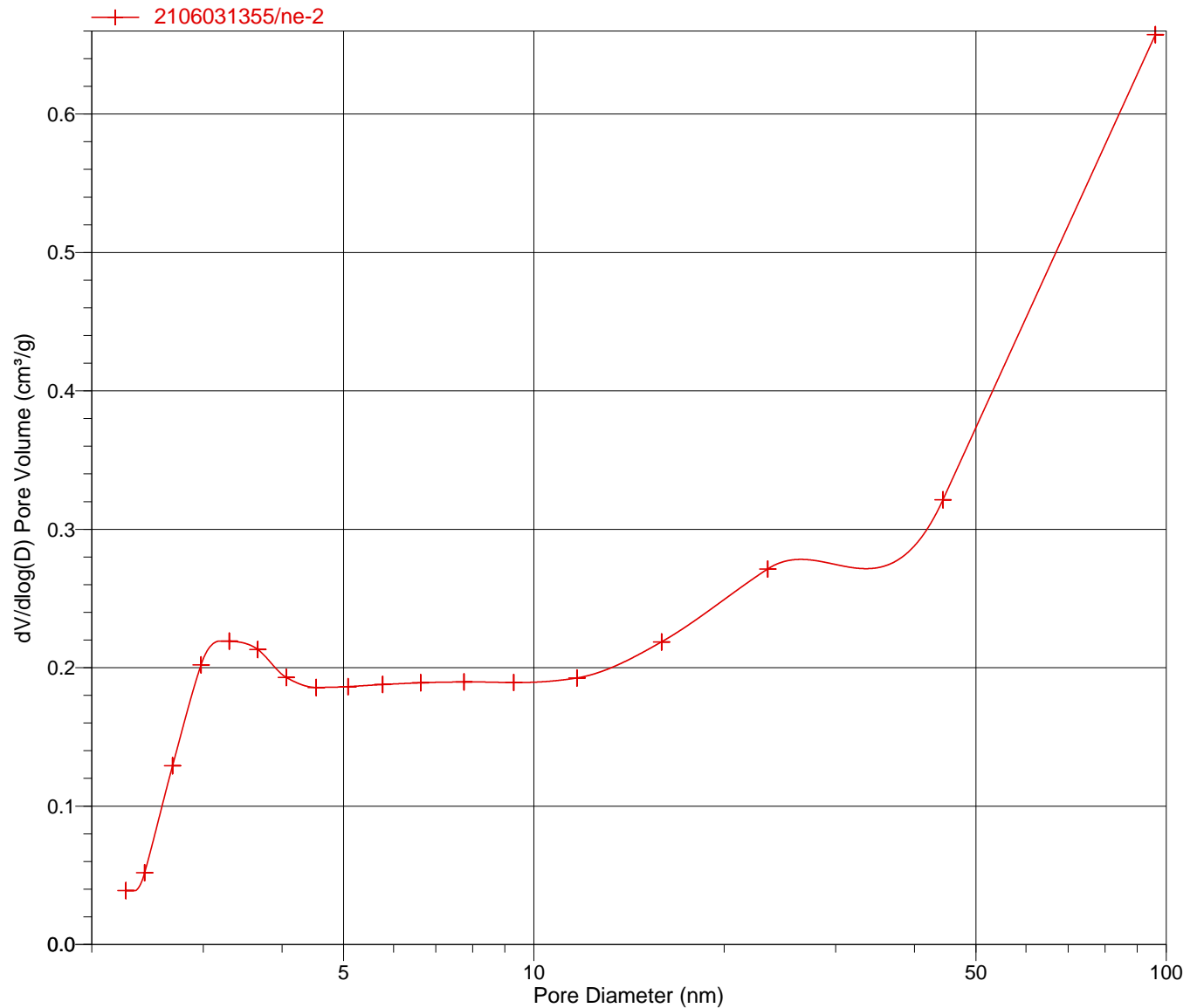
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BJH Adsorption dV/dlog(D) Pore Volume

User-Defined : Standard



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Automatic Degas: No
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Analysis Bath Temp.: -195.800 °C
Thermal Correction: No
Warm Free Space: 10.2433 cm³ Measured
Equilibration Interval: 5 s
Sample Density: 1.000 g/cm³

BJH Desorption Pore Distribution Report

Standard
User-Defined

Reference Curve: SIO2OH.THK

Diameter Range: 1.7000 nm to 300.0000 nm
Adsorbate Property Factor: 0.95300 nm
Density Conversion Factor: 0.0015500
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)
119.3 - 92.5	102.5	0.008510	0.008510	0.332	0.332
92.5 - 45.8	55.1	0.112379	0.120889	8.160	8.492
45.8 - 22.0	25.9	0.173743	0.294632	26.790	35.282
22.0 - 13.6	15.7	0.068789	0.363421	17.477	52.759
13.6 - 11.1	12.0	0.025267	0.388687	8.398	61.157
11.1 - 8.7	9.6	0.023895	0.412582	10.000	71.157
8.7 - 7.1	7.7	0.015183	0.427765	7.852	79.009
7.1 - 6.1	6.5	0.010261	0.438026	6.295	85.304
6.1 - 5.6	5.8	0.005394	0.443420	3.724	89.028
5.6 - 4.9	5.2	0.007154	0.450575	5.535	94.563
4.9 - 4.4	4.6	0.006510	0.457085	5.680	100.243
4.4 - 3.9	4.1	0.016009	0.473094	15.639	115.882
3.9 - 3.5	3.7	0.015396	0.488489	16.711	132.593
3.5 - 3.2	3.3	0.009112	0.497601	10.959	143.552
3.2 - 2.9	3.0	0.007223	0.504824	9.564	153.116
2.9 - 2.6	2.7	0.006613	0.511436	9.700	162.816
2.6 - 2.3	2.4	0.002770	0.514207	4.532	167.348

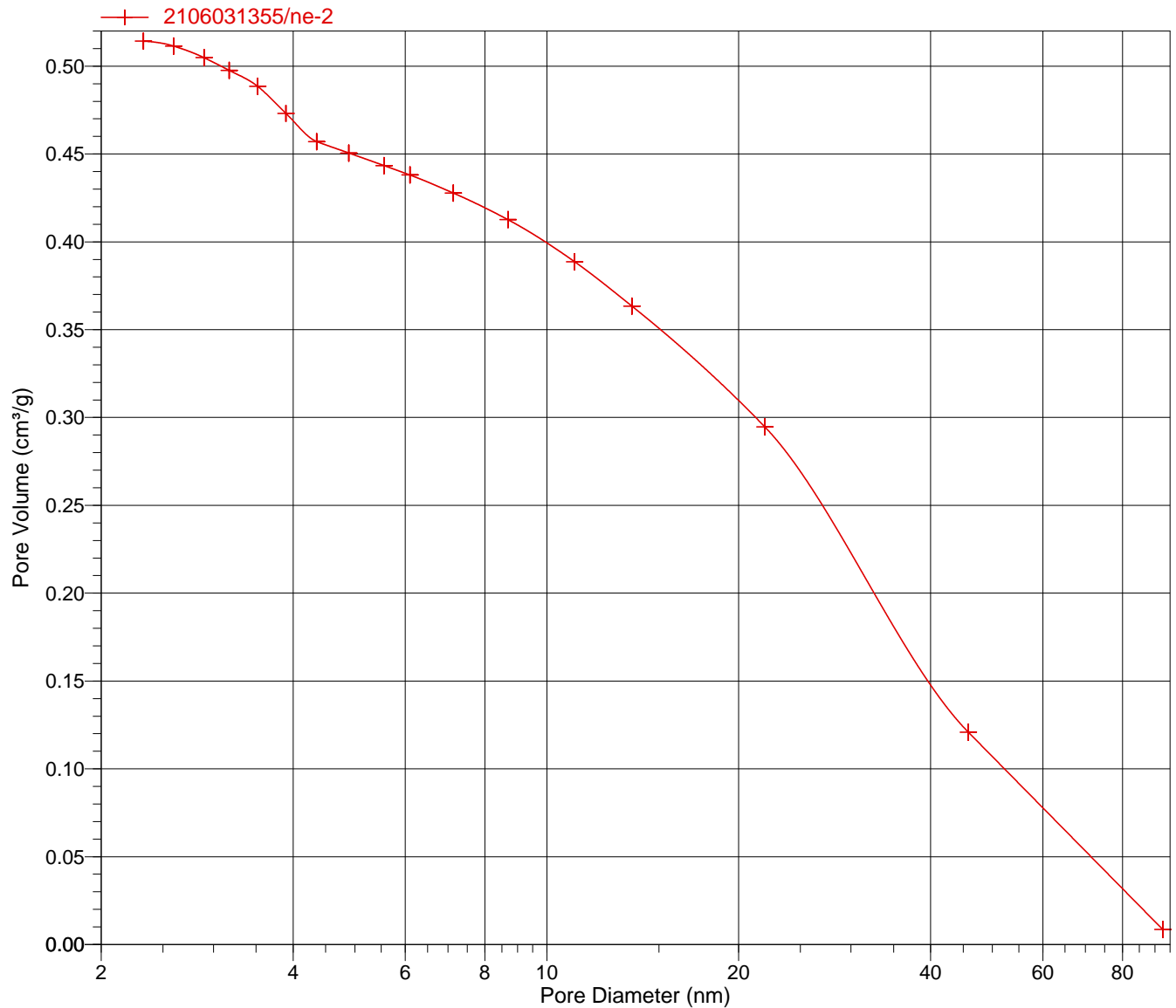
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BJH Desorption Cumulative Pore Volume (Larger)

User-Defined : Standard



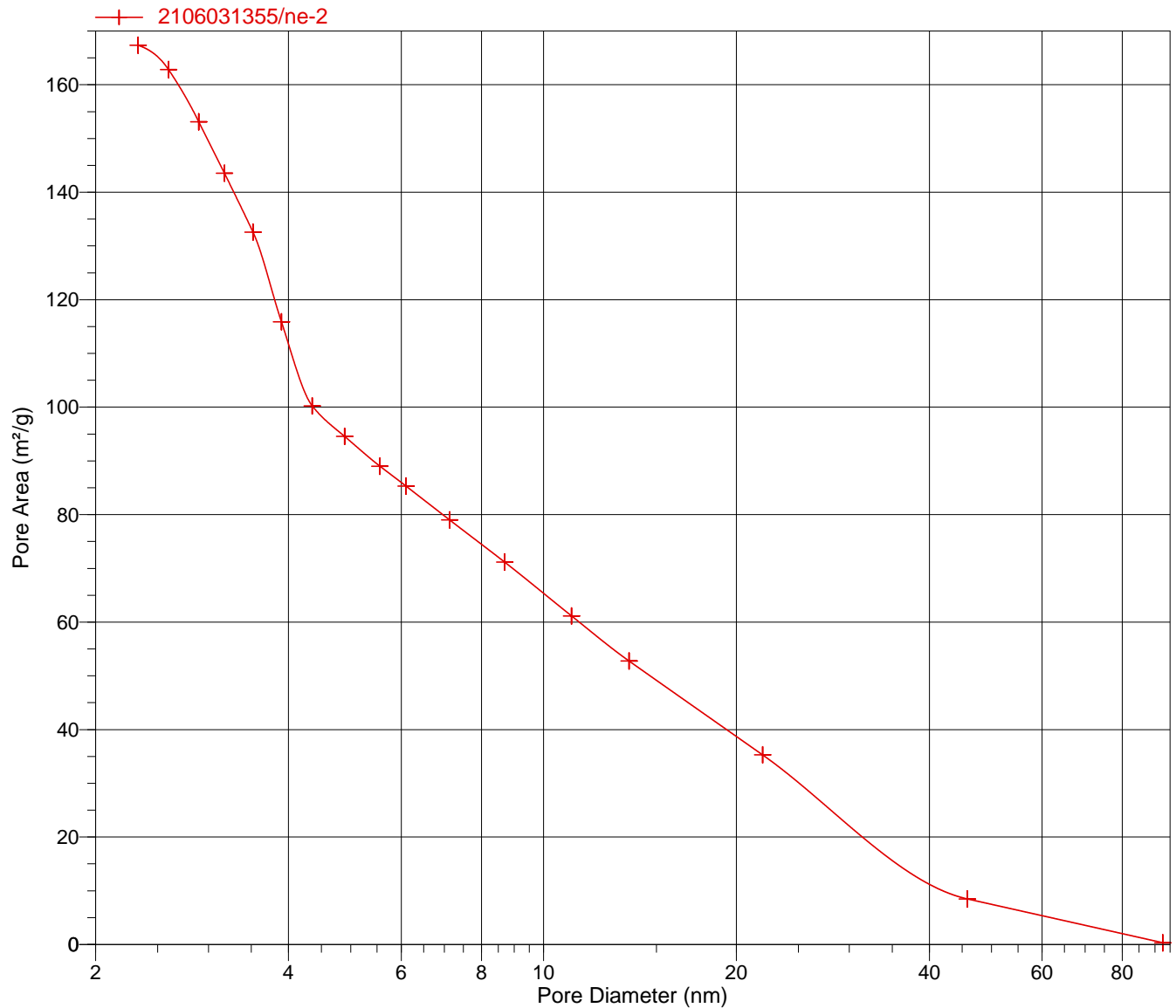
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Thermal Correction: No
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Equilibration Interval: 5 s
Sample Density: 1.000 g/cm³

BJH Desorption Cumulative Pore Area (Larger)

User-Defined : Standard



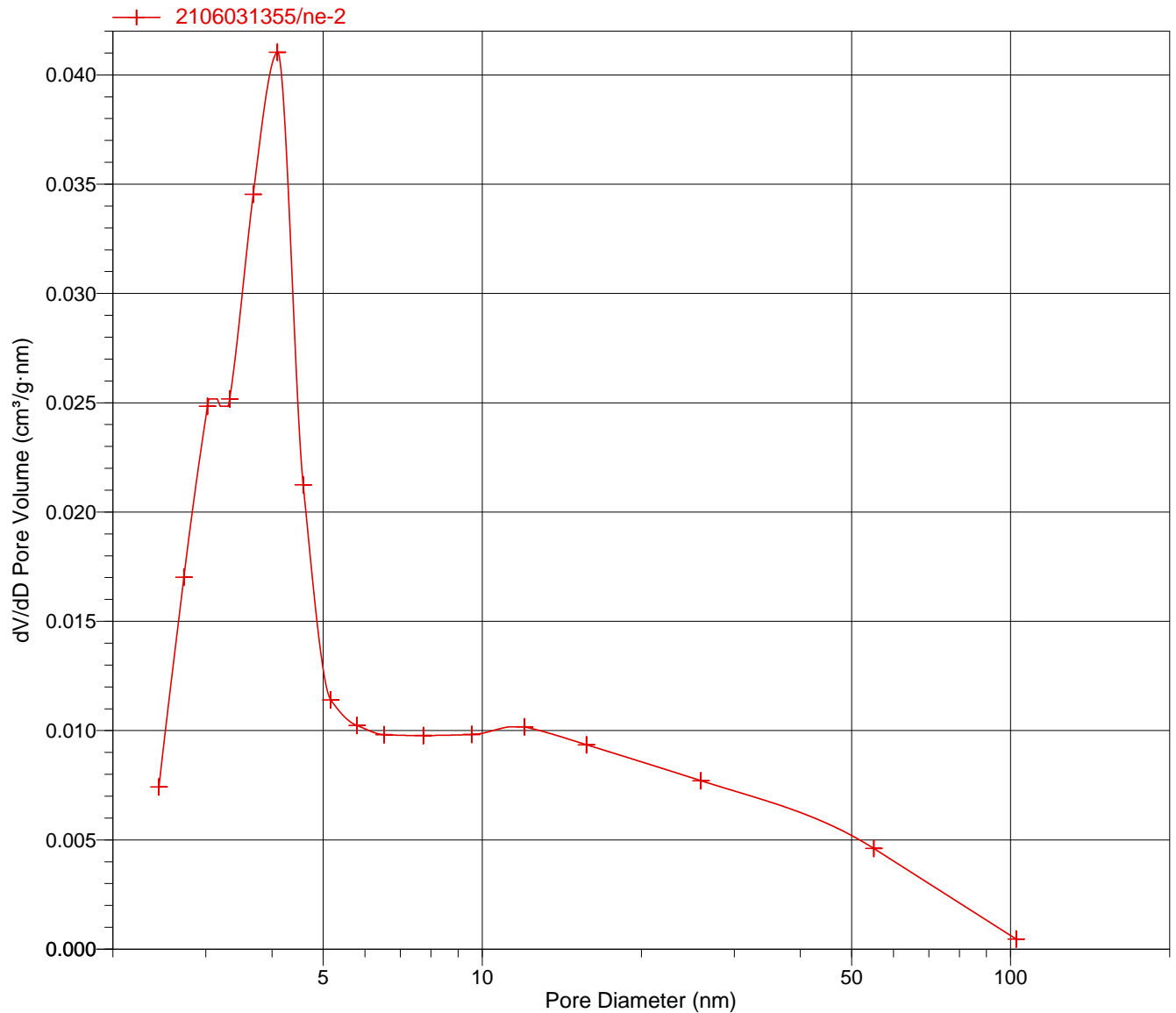
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BJH Desorption dV/dD Pore Volume

User-Defined : Standard



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BJH Desorption dV/dlog(D) Pore Volume

User-Defined : Standard

