

Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27	Analysis adsorptive: N2
Completed: 2023/9/23 12:31:47	Analysis bath temp.: -195.850 °C
Report time: 2023/9/23 15:36:08	Thermal correction: No
Sample mass: 0.1290 g	Ambient free space: 28.2109 cm ³ Measured
Analysis free space: 85.5725 cm ³	Equilibration interval: 20 s
Low pressure dose: 12.0000 cm ³ /g STP	Sample density: 1.000 g/cm ³
Automatic degas: No	

Report Preparation Errors

4063- No subreports selected. Error generating Advanced Reports.

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Summary Report

Surface Area

Single point surface area at P/Po = 0.289873371: 382.7947 m²/g

BET Surface Area: 391.4936 m²/g

Langmuir Surface Area: 1,801.1543 m²/g

t-Plot Micropore Area: 35.1424 m²/g

t-Plot external surface area: 356.3512 m²/g

BJH Adsorption cumulative surface area of pores
between 17.000 Å and 3,000.000 Å diameter: 374.7974 m²/g

BJH Desorption cumulative surface area of pores
between 17.000 Å and 3,000.000 Å diameter: 430.2992 m²/g

D-H Adsorption cumulative surface area of pores
between 17.000 Å and 3,000.000 Å diameter: 366.2269 m²/g

D-H Desorption cumulative surface area of pores
between 17.000 Å and 3,000.000 Å diameter: 419.3449 m²/g

Pore Volume

Single point adsorption total pore volume of pores
less than 3,841.792 Å diameter at P/Po = 0.995000000: 0.576058 cm³/g

t-Plot micropore volume: 0.015486 cm³/g

BJH Adsorption cumulative volume of pores
between 17.000 Å and 3,000.000 Å diameter: 0.527097 cm³/g

BJH Desorption cumulative volume of pores
between 17.000 Å and 3,000.000 Å diameter: 0.545436 cm³/g

Pore Size

Adsorption average pore diameter (4V/A by BET): 58.857 Å

Desorption average pore diameter (4V/A by BET): 56.483 Å

BJH Adsorption average pore diameter (4V/A): 56.254 Å

BJH Desorption average pore diameter (4V/A): 50.703 Å

Freundlich

Qm·C: 31.1389 ± 1.9288 cm³/g STP

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Automatic degas: No	

Freundlich

m: 3.2574 ± 0.2743

DFT Pore Size

Volume in Pores	<	8.04 Å	:	0.00000 cm ³ /g
Total Volume in Pores	<=	4,003.09 Å	:	0.54361 cm ³ /g
Total Area in Pores	>=	8.04 Å	:	238.864 m ² /g

Horvath-KawazoeMaximum pore volume at P/Po = 0.168787460: 0.164164 cm³/g

Median pore width: 7.325 Å

Pass/Fail

S A:Single-point BET: No range values were specified
S A:Single-point BET: No range values were specified

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 Thermal correction: No
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 Sample density: 1.000 g/cm³

Validation errors exist for this report. Review the validation report for details.

Isotherm Tabular Report

Relative Pressure (P/Po)	Absolute Pressure (mmHg)	Quantity Adsorbed (cm ³ /g STP)	Elapsed Time (h:min)	Saturation Pressure (mmHg)
0.000017012	0.013014	11.6760	01:40	765.750671
0.011056415	8.450863	63.8259	03:14	764.980042
0.031073031	23.751530	76.0576	05:40	764.340271
0.050426735	38.548420	82.9248	05:47	764.377625
0.099671748	76.195450	94.4730	05:53	764.444092
0.128992469	98.617317	99.7687	05:59	764.463867
0.168787460	129.023148	106.1314	06:03	764.519958
0.209073910	159.843781	112.1297	06:08	764.411926
0.249482072	190.726501	117.9388	06:13	764.532410
0.289873371	221.604034	123.8464	06:17	764.489807
0.300800417	229.951050	125.5078	06:22	764.485657
0.348600859	266.539825	132.8809	06:26	764.463867
0.396934969	303.492737	141.1182	06:31	764.598877
0.446565070	341.373566	150.8190	06:36	764.590576
0.495542128	378.829193	162.3401	06:42	764.443054
0.544432564	416.290039	176.5113	06:50	764.474243
0.599845568	458.665558	197.6436	06:58	764.631042
0.649183667	496.430481	224.1009	07:10	764.639404
0.697820358	533.689636	259.9926	07:25	764.699585
0.745831926	570.538025	302.9727	07:42	764.795166
0.803052697	614.310120	336.0876	08:01	764.968628
0.846734387	647.719971	344.5130	08:12	764.968628
0.907043613	693.943726	353.4213	08:19	764.962402
0.951713659	728.095337	354.3580	08:27	765.061035
0.997027424	762.816895	373.2651	08:29	765.036133
0.941549963	720.381348	354.5411	08:40	765.091187
0.877739836	671.560120	353.3184	08:42	765.101563
0.827507613	633.170349	352.2343	08:45	765.101563
0.796245167	609.275391	350.8745	08:47	765.153503
0.748365457	572.640076	339.7405	08:50	765.185669
0.690584608	528.456299	333.0179	09:02	765.187744
0.648582445	496.329102	316.0453	09:08	765.230347
0.596176422	456.225281	255.0127	09:20	765.252136
0.546034827	417.911041	195.6222	09:49	765.252136
0.500165609	382.772552	171.0246	10:16	765.356018
0.447624627	342.546631	154.0765	10:28	765.291626
0.382311784	292.550232	140.0857	10:38	765.254211
0.350927545	268.535309	134.7817	10:46	765.213745
0.299021331	228.790375	126.7143	10:51	765.215820
0.247479007	189.352737	119.2416	10:56	765.130615
0.197479951	151.086060	112.1008	11:01	765.126465
0.147474973	112.819389	104.5787	11:06	765.070374
0.097760669	74.779274	96.0071	11:11	765.007019
0.044865952	34.319553	83.2485	11:16	764.921875
			11:23	764.935364

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Low pressure dose: 12.0000 cm ³ /g STP	Sample density: 1.000 g/cm ³
Automatic degas: No	

Isotherm Tabular Report

Relative Pressure (P/Po)	Absolute Pressure (mmHg)	Quantity Adsorbed (cm ³ /g STP)	Elapsed Time (h:min)	Saturation Pressure (mmHg)
0.010369995	7.931568	65.4654	11:37	764.857483

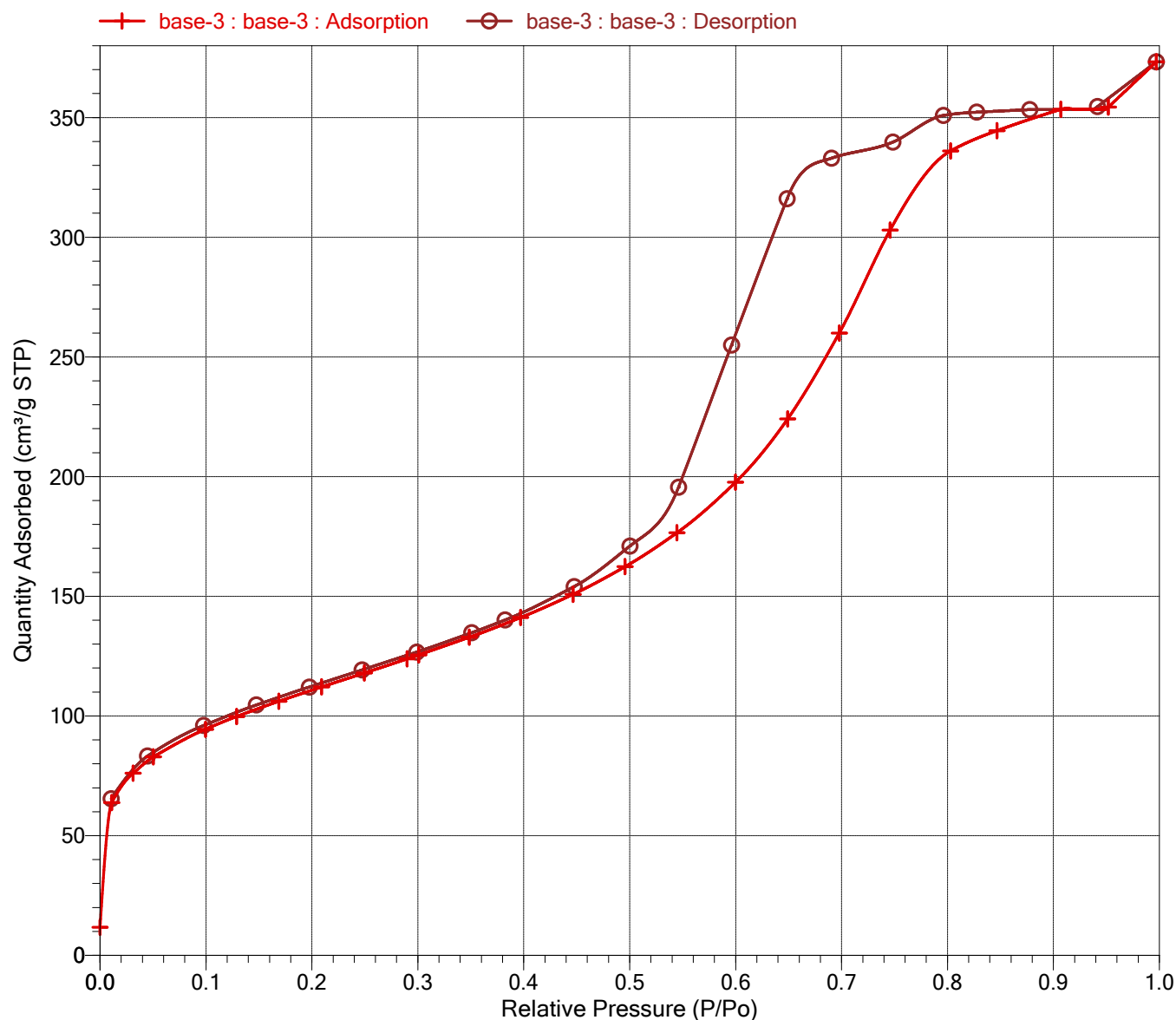
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Low pressure dose: 12.0000 cm³/g STP
Automatic degas: No

Analysis adsorptive: N₂
Analysis bath temp.: -195.850 °C
Thermal correction: No
Ambient free space: 28.2109 cm³ Measured
Equilibration interval: 20 s
Sample density: 1.000 g/cm³

Validation errors exist for this report. Review the validation report for details.

Isotherm Linear Plot



Sample: base-3

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Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

Thermal correction: No

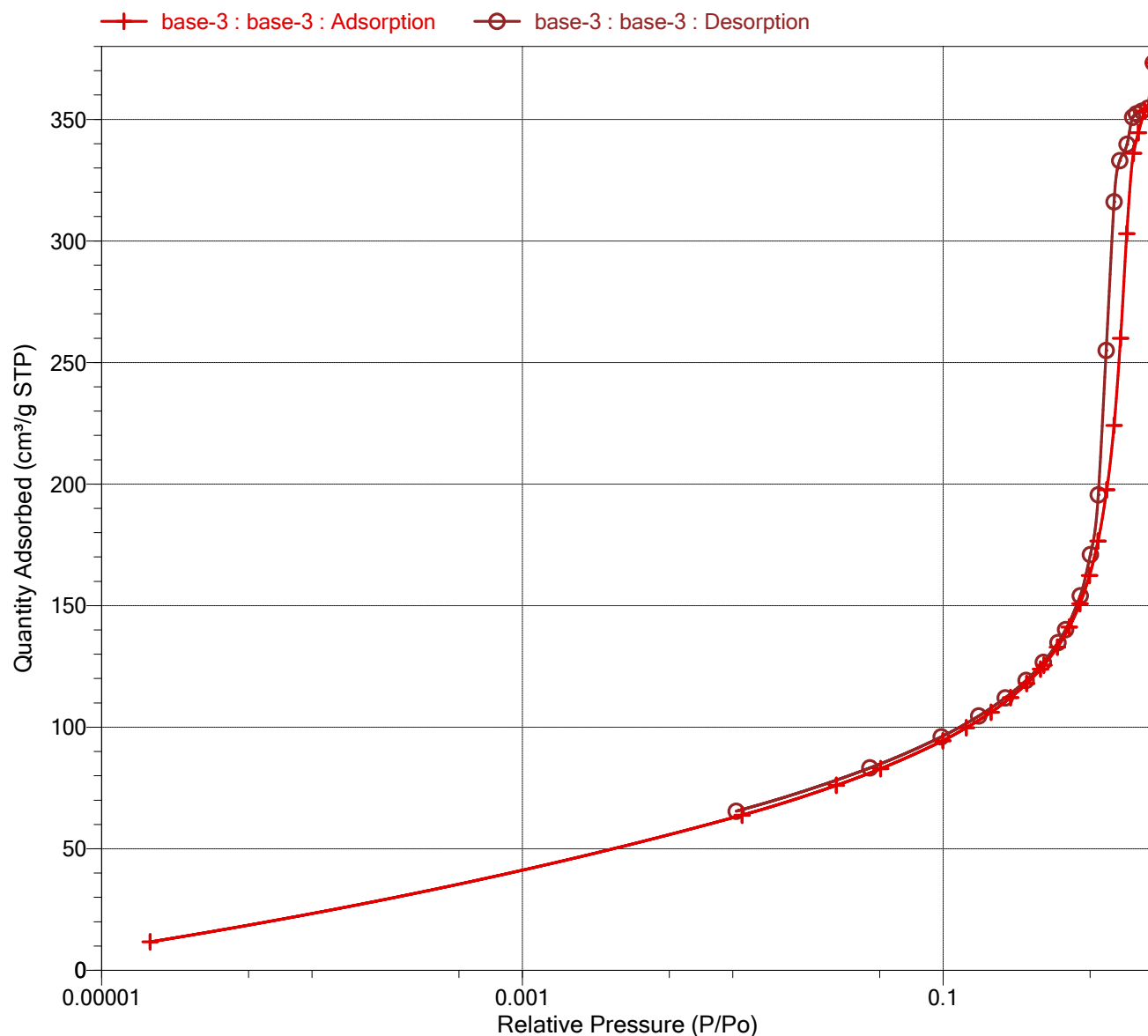
Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

Validation errors exist for this report. Review the validation report for details.

Isotherm Log Plot



Sample: base-3

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Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

Thermal correction: No

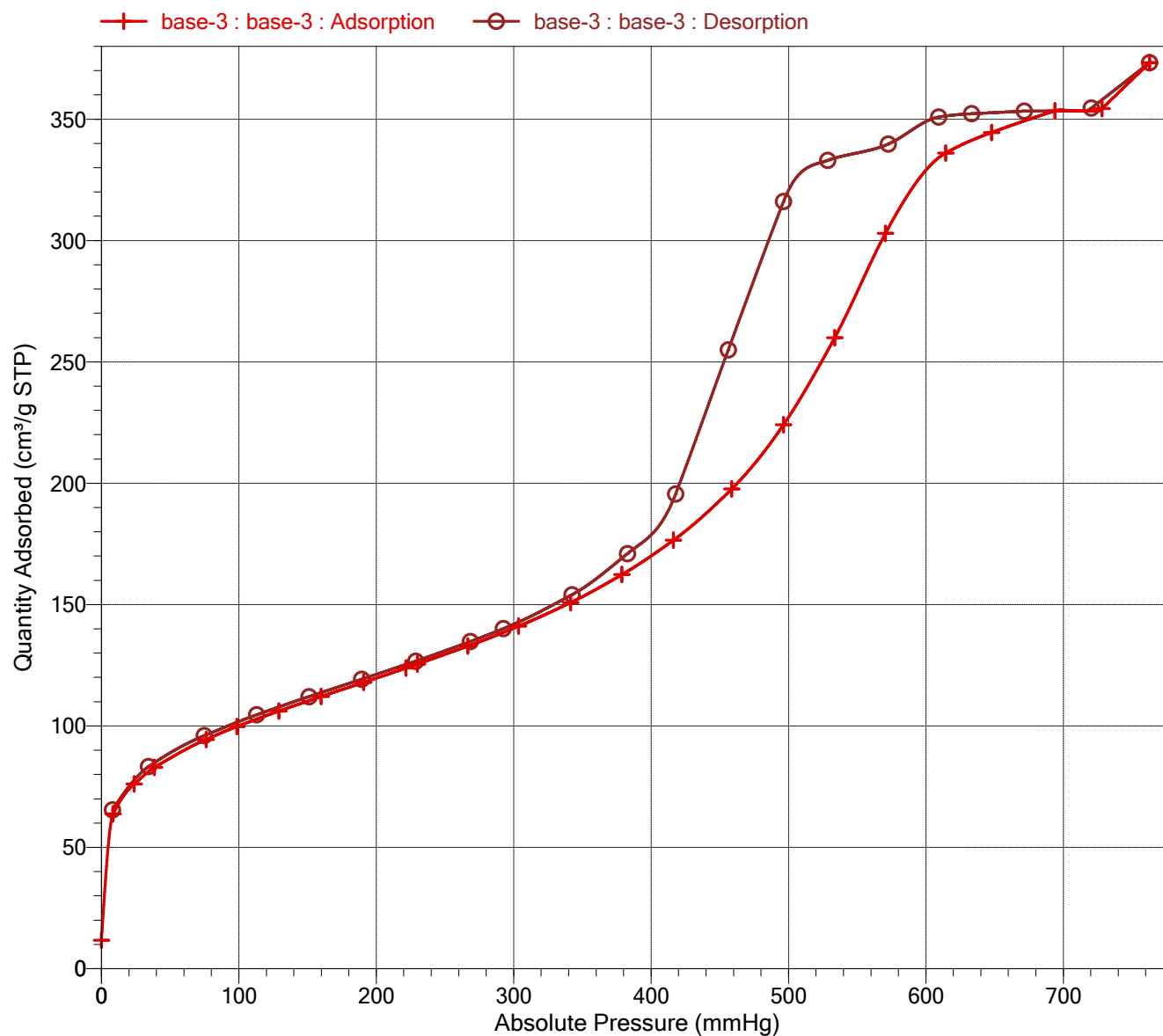
Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

Validation errors exist for this report. Review the validation report for details.

Isotherm Linear Absolute Plot



Sample: base-3

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Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

Thermal correction: No

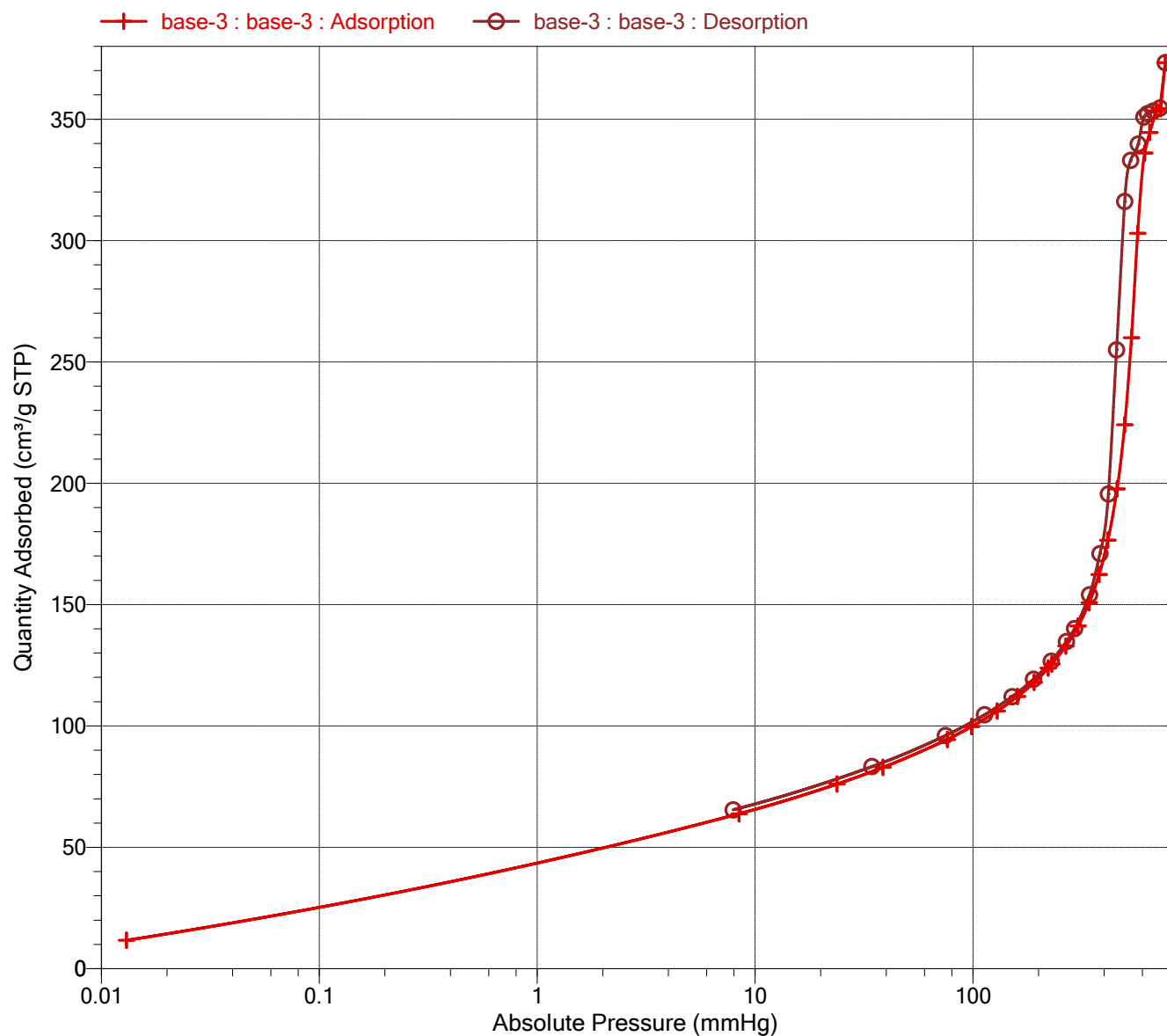
Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

Validation errors exist for this report. Review the validation report for details.

Isotherm Log Absolute Plot



Sample: base-3

Operator:

Submitter:

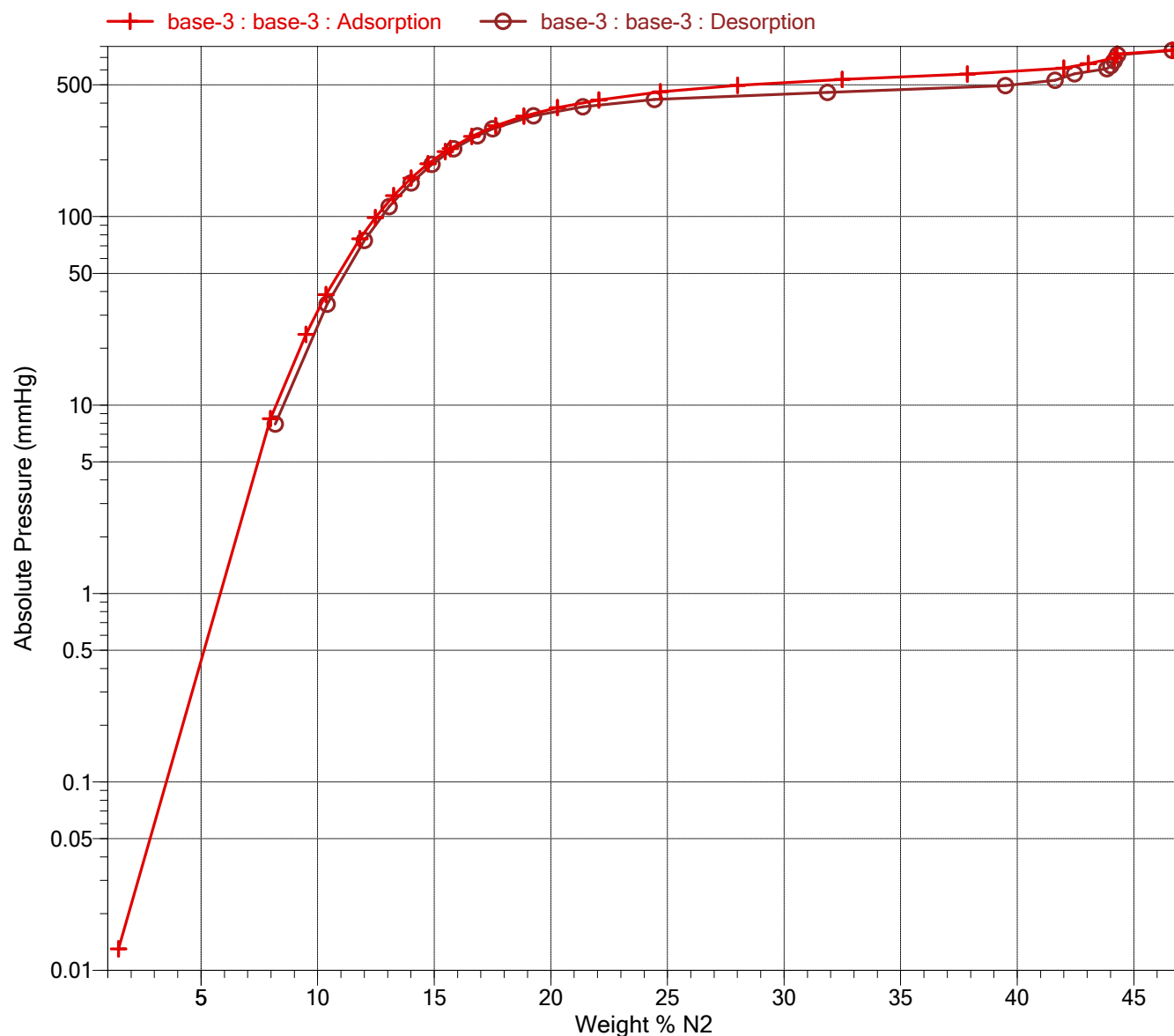
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Automatic degas: No

Analysis adsorptive: N2
Analysis bath temp.: -195.850 °C
Thermal correction: No
Ambient free space: 28.2109 cm³ Measured
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Isotherm Pressure Composition



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Automatic degas: No

Analysis adsorptive: N2
Analysis bath temp.: -195.850 °C
Thermal correction: No
Ambient free space: 28.2109 cm³ Measured
Equilibration interval: 20 s
Sample density: 1.000 g/cm³

BET Report

BET surface area: 391.4936 ± 3.2517 m²/g
Slope: 0.011052 ± 0.000091 g/cm³ STP
Y-intercept: 0.000066 ± 0.000017 g/cm³ STP
C: 169.133576
Qm: 89.9452 cm³/g STP
Correlation coefficient: 0.9998315
Molecular cross-sectional area: 0.1620 nm²

Relative Pressure (P/Po)	Quantity Adsorbed (cm ³ /g STP)	1/[Q(Po/P - 1)]
0.050426735	82.9248	0.000640
0.099671748	94.4730	0.001172
0.128992469	99.7687	0.001484
0.168787460	106.1314	0.001913
0.209073910	112.1297	0.002357
0.249482072	117.9388	0.002819
0.289873371	123.8464	0.003296

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Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N2

Analysis bath temp.: -195.850 °C

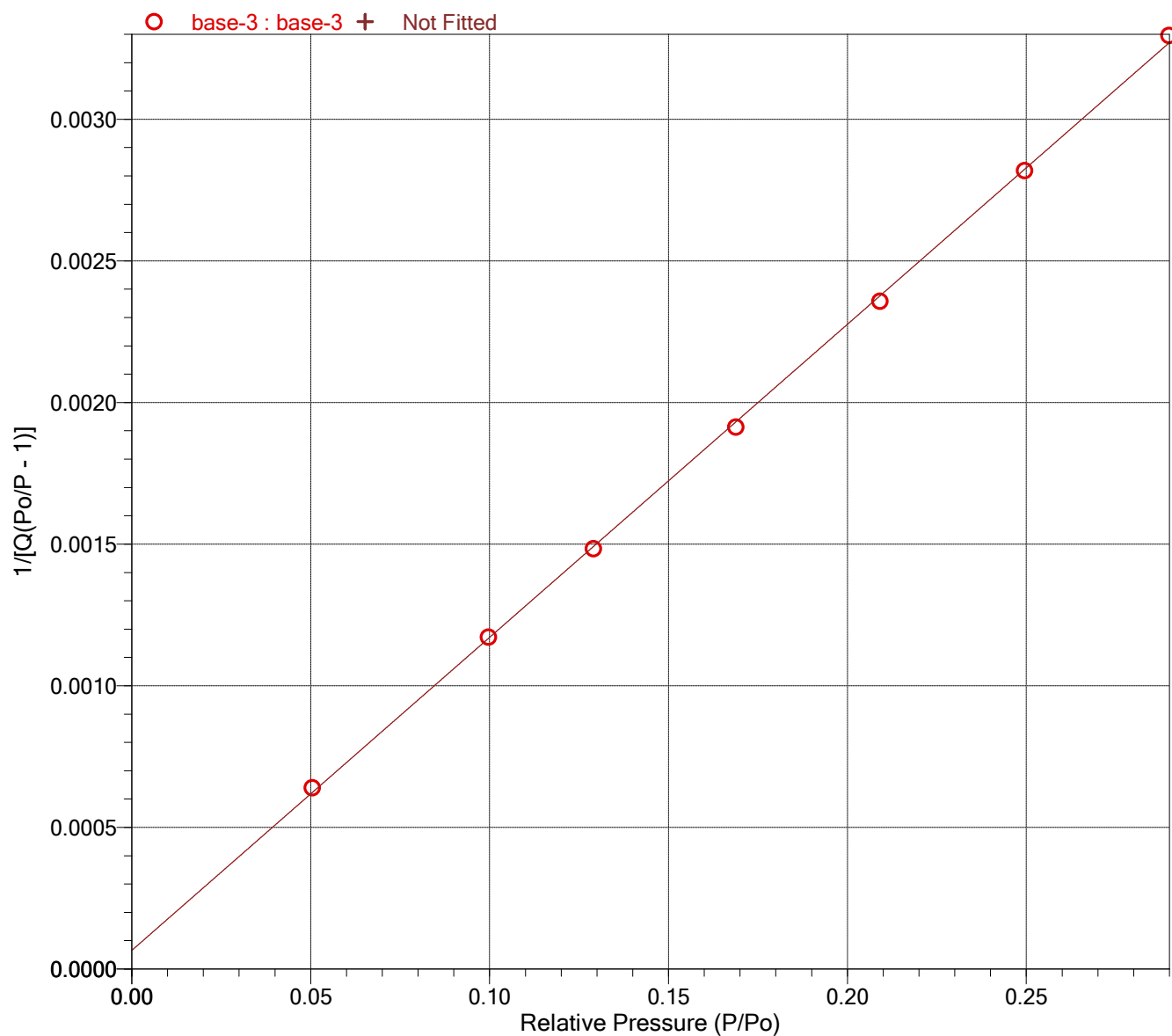
Thermal correction: No

Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

BET Surface Area Plot



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 Automatic degas: No

Analysis adsorptive: N2
 Analysis bath temp.: -195.850 °C
 Thermal correction: No
 Ambient free space: 28.2109 cm³ Measured
 Equilibration interval: 20 s
 Sample density: 1.000 g/cm³

Langmuir Report

Langmuir surface area: 1,801.1543 ± 327.9357 m²/g
 Slope: 0.002417 ± 0.000440 g/cm³ STP
 Y-intercept: 0.811 ± 0.172 g/cm³ STP·mmHg
 b: 0.002980 1/mmHg
 Qm: 413.8132 cm³/g STP
 Correlation coefficient: 0.760443
 Molecular cross-sectional area: 0.1620 nm²

Pressure (mmHg)	Quantity Adsorbed (cm ³ /g STP)	P/Q (g/cm ³ STP ·mmHg)
0.013014	11.6760	0.001
8.450863	63.8259	0.132
23.751530	76.0576	0.312
38.548420	82.9248	0.465
76.195450	94.4730	0.807
98.617317	99.7687	0.988
129.023148	106.1314	1.216
159.843781	112.1297	1.426
190.726501	117.9388	1.617
221.604034	123.8464	1.789
229.951050	125.5078	1.832
266.539825	132.8809	2.006
303.492737	141.1182	2.151
341.373566	150.8190	2.263
378.829193	162.3401	2.334
416.290039	176.5113	2.358
458.665558	197.6436	2.321
496.430481	224.1009	2.215
533.689636	259.9926	2.053
570.538025	302.9727	1.883
614.310120	336.0876	1.828
647.719971	344.5130	1.880
693.943726	353.4213	1.964
728.095337	354.3580	2.055

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Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

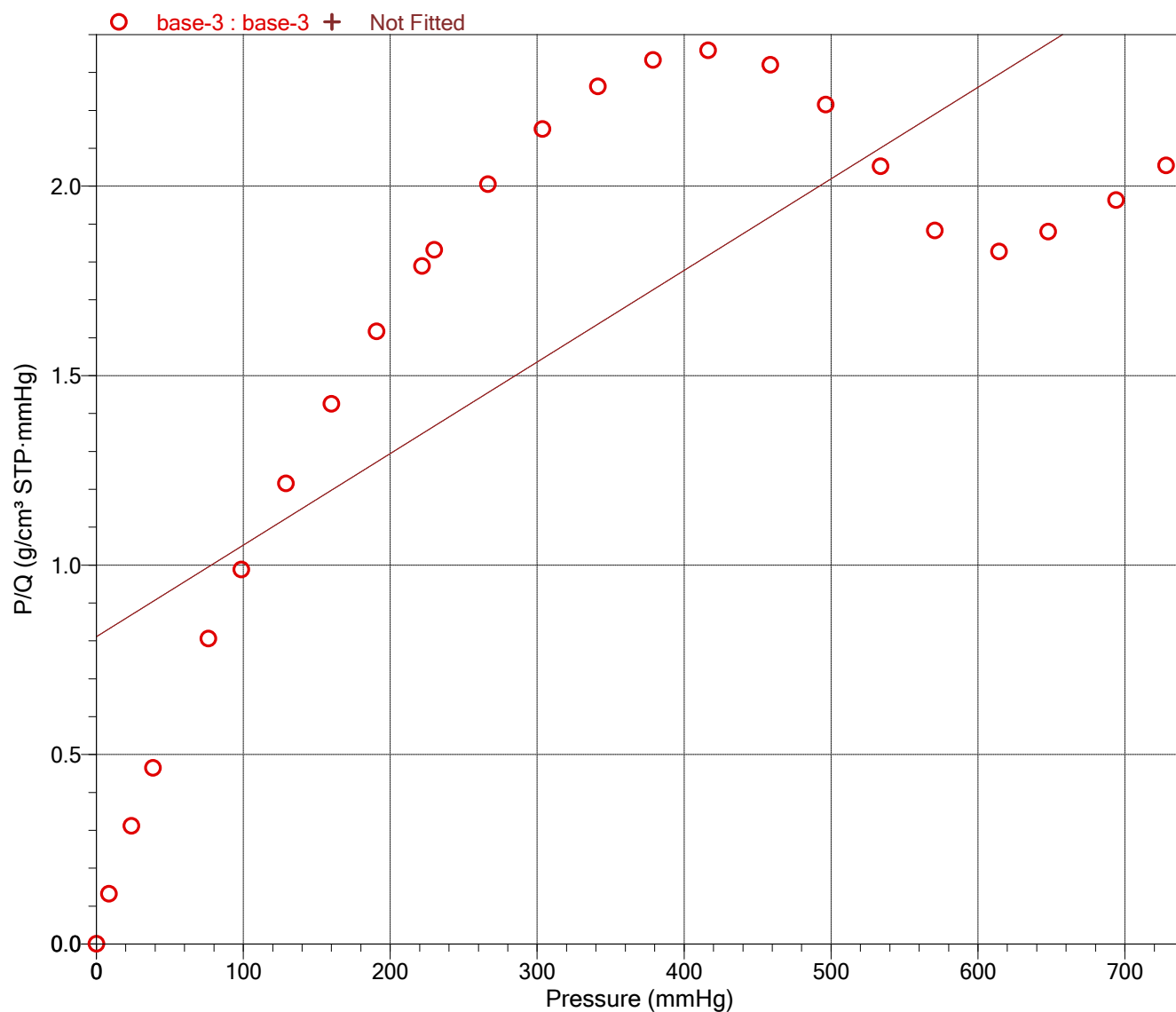
Thermal correction: No

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Sample density: 1.000 g/cm³

Langmuir Surface Area Plot



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 Automatic degas: No

Analysis adsorptive: N2
 Analysis bath temp.: -195.850 °C
 Thermal correction: No
 Ambient free space: 28.2109 cm³ Measured
 Equilibration interval: 20 s
 Sample density: 1.000 g/cm³

Freundlich Tabular Report

Qm·C: 31.1389 ± 1.9288 cm³/g STP

m: 3.2574 ± 0.2743

Correlation coefficient: 0.927248

Absolute Pressure (mmHg)	Quantity Adsorbed (cm ³ /g STP)	log(P)	log(Q)
0.013014	11.6760	-1.88559	1.0673
8.450863	63.8259	0.92690	1.8050
23.751530	76.0576	1.37569	1.8811
38.548420	82.9248	1.58601	1.9187
76.195450	94.4730	1.88193	1.9753
98.617317	99.7687	1.99395	1.9990
129.023148	106.1314	2.11067	2.0258
159.843781	112.1297	2.20370	2.0497
190.726501	117.9388	2.28041	2.0717
221.604034	123.8464	2.34558	2.0929
229.951050	125.5078	2.36164	2.0987
266.539825	132.8809	2.42576	2.1235
303.492737	141.1182	2.48215	2.1496
341.373566	150.8190	2.53323	2.1785
378.829193	162.3401	2.57844	2.2104
416.290039	176.5113	2.61940	2.2468
458.665558	197.6436	2.66150	2.2959
496.430481	224.1009	2.69586	2.3504
533.689636	259.9926	2.72729	2.4150
570.538025	302.9727	2.75628	2.4814
614.310120	336.0876	2.78839	2.5265
647.719971	344.5130	2.81139	2.5372
693.943726	353.4213	2.84132	2.5483
728.095337	354.3580	2.86219	2.5494
762.816895	373.2651	2.88242	2.5720

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Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

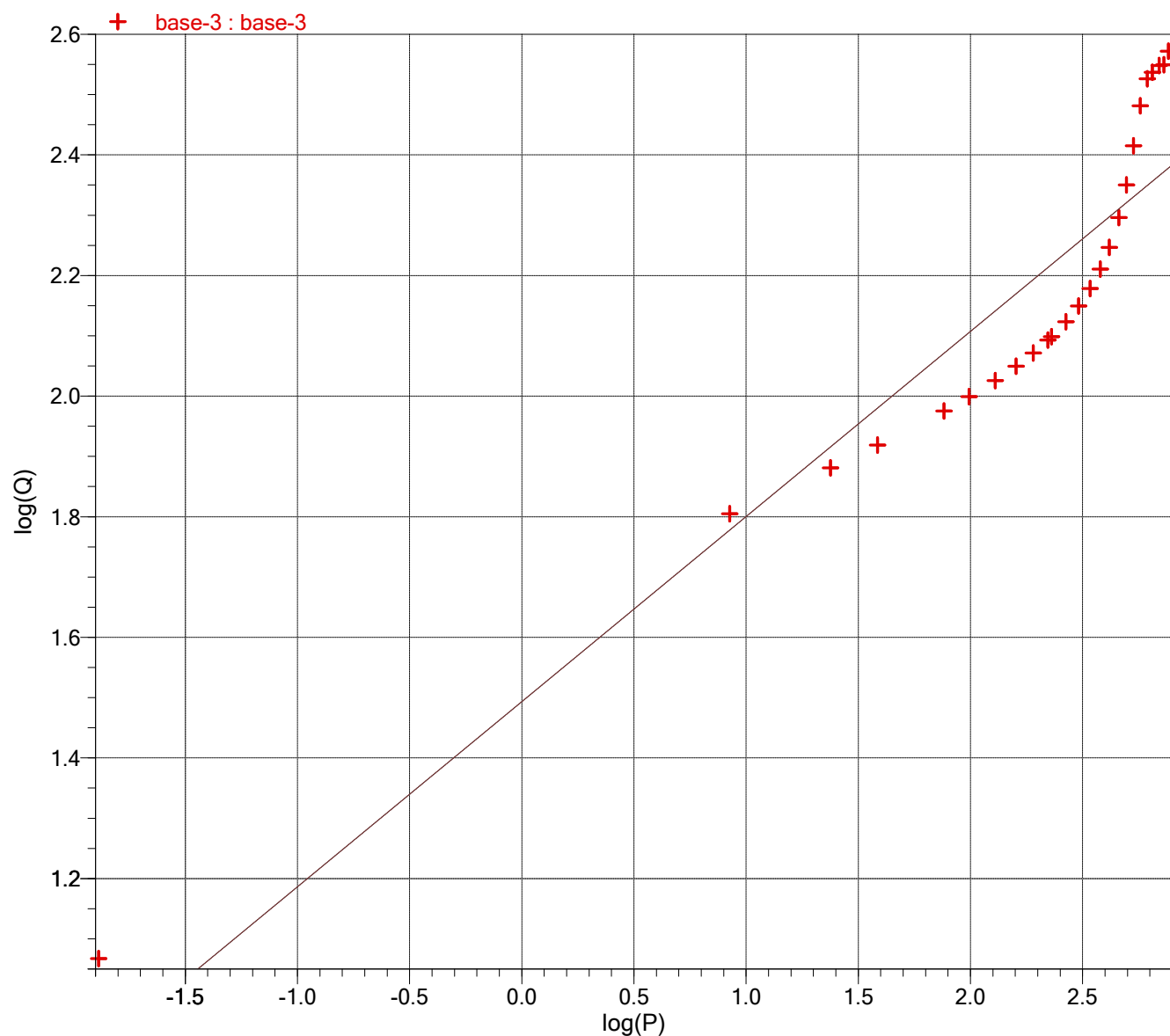
Thermal correction: No

Ambient free space: 28.2109 cm³ Measured

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Sample density: 1.000 g/cm³

Freundlich Plot



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 Sample density: 1.000 g/cm³

Temkin Tabular Report

 $q \cdot \alpha / Q_m: 0.020682 \pm 0.004923 \text{ kJ/mol} \cdot (\text{cm}^3/\text{g STP})$
 $A: 2.1640 \pm 2.8695 \text{ mmHg}$

Correlation coefficient: 0.658950

Absolute Pressure (mmHg)	Quantity Adsorbed (cm ³ /g STP)	ln(P)
0.013014	11.6760	-4.34172
8.450863	63.8259	2.13427
23.751530	76.0576	3.16765
38.548420	82.9248	3.65192
76.195450	94.4730	4.33330
98.617317	99.7687	4.59125
129.023148	106.1314	4.85999
159.843781	112.1297	5.07420
190.726501	117.9388	5.25084
221.604034	123.8464	5.40089
229.951050	125.5078	5.43787
266.539825	132.8809	5.58552
303.492737	141.1182	5.71536
341.373566	150.8190	5.83298
378.829193	162.3401	5.93709
416.290039	176.5113	6.03138
458.665558	197.6436	6.12832
496.430481	224.1009	6.20744
533.689636	259.9926	6.27981
570.538025	302.9727	6.34658
614.310120	336.0876	6.42050
647.719971	344.5130	6.47346
693.943726	353.4213	6.54239
728.095337	354.3580	6.59043
762.816895	373.2651	6.63702

Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

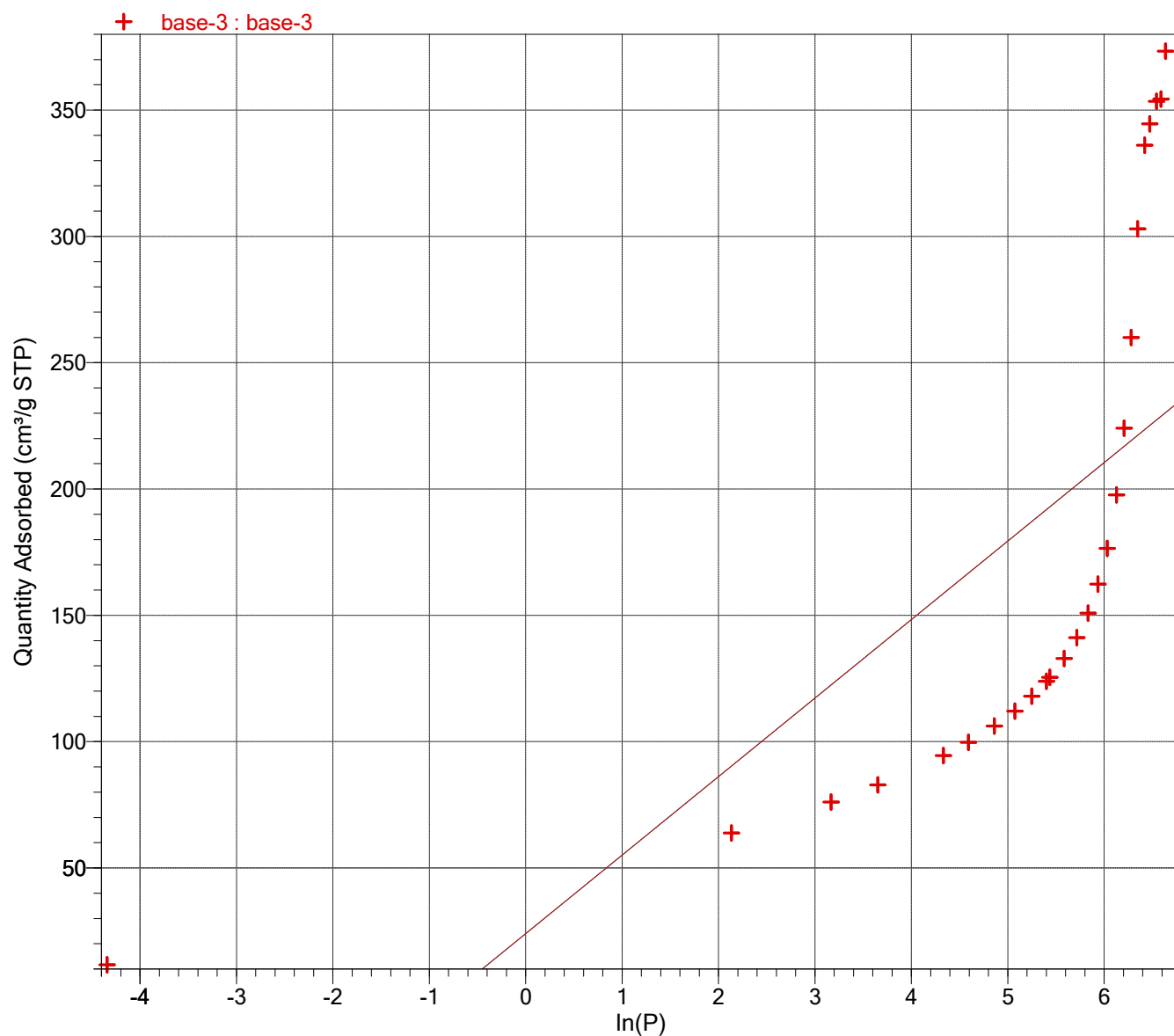
Thermal correction: No

Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

Temkin Plot



Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
 Completed: 2023/9/23 12:31:47
 Report time: 2023/9/23 15:36:08
 Sample mass: 0.1290 g
 Analysis free space: 85.5725 cm³
 Low pressure dose: 12.0000 cm³/g STP
 Automatic degas: No

Analysis adsorptive: N2
 Analysis bath temp.: -195.850 °C
 Thermal correction: No
 Ambient free space: 28.2109 cm³ Measured
 Equilibration interval: 20 s
 Sample density: 1.000 g/cm³

t-Plot Report

Micropore volume: 0.015486 cm³/g
 Micropore area: 35.1424 m²/g
 External surface area: 356.3512 m²/g
 Slope: 23.037962 ± 0.159917 cm³/g·Å STP
 Y-intercept: 10.011850 ± 0.691034 cm³/g STP
 Correlation coefficient: 0.999904
 Surface area correction factor: 1.000
 Density conversion factor: 0.0015468
 Total surface area (BET): 391.4936 m²/g
 Thickness range: 3.5000 to 5.0000 Å
 Thickness equation: Harkins and Jura

Thickness Curve

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

t-Plot Report - Data

Relative Pressure (P/P _o)	Statistical Thickness (Å)	Quantity Adsorbed (cm ³ /g STP)	Fitted
0.050426735	3.2416	82.9248	
0.099671748	3.6758	94.4730	*
0.128992469	3.8923	99.7687	*
0.168787460	4.1645	106.1314	*
0.209073910	4.4274	112.1297	*
0.249482072	4.6865	117.9388	*
0.289873371	4.9464	123.8464	*
0.300800417	5.0174	125.5078	
0.348600859	5.3342	132.8809	
0.396934969	5.6692	141.1182	
0.446565070	6.0350	150.8190	
0.495542128	6.4248	162.3401	
0.544432564	6.8511	176.5113	
0.599845568	7.3930	197.6436	
0.649183667	7.9450	224.1009	
0.697820358	8.5751	259.9926	

Sample: base-3

Operator:

Submitter:

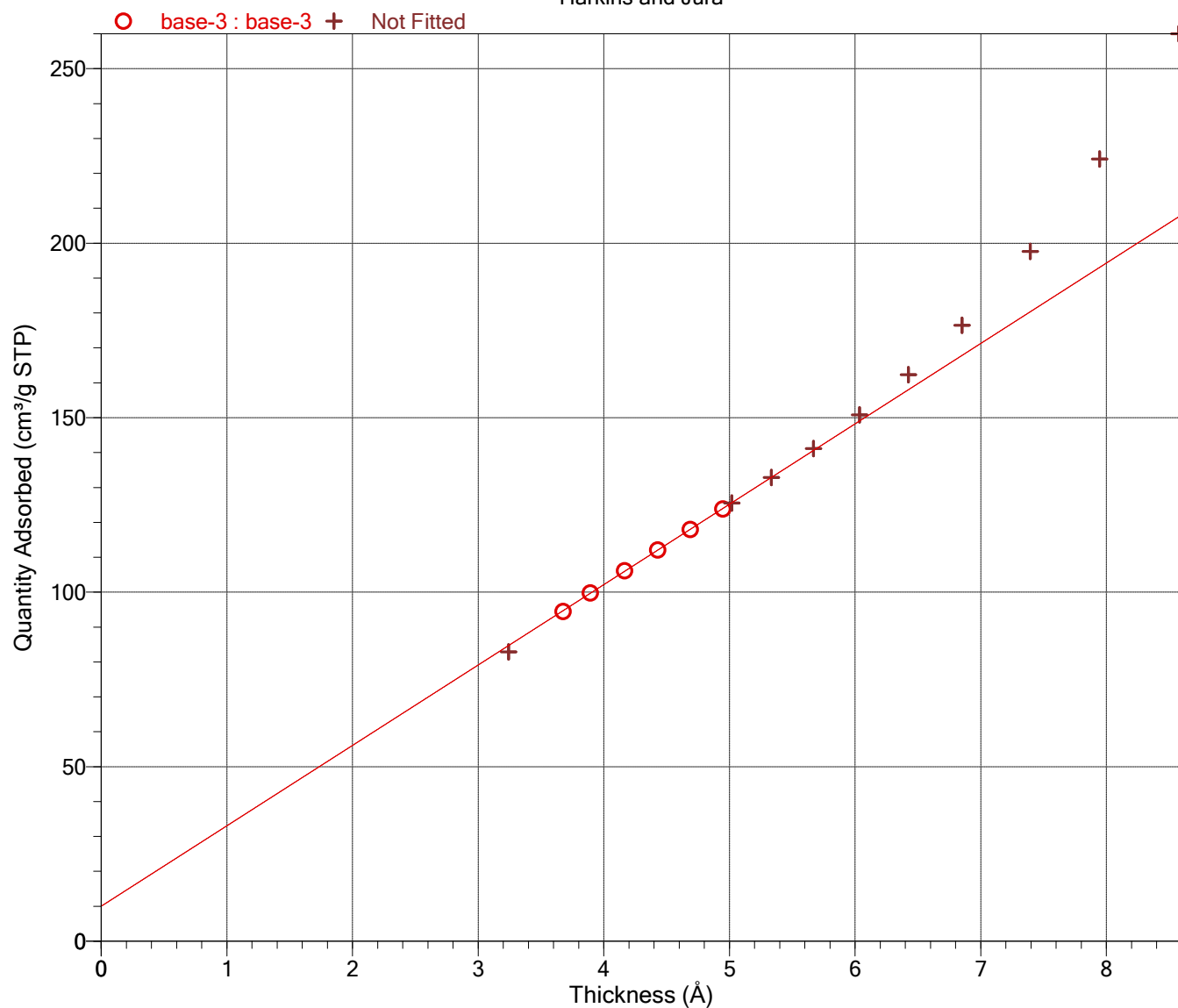
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
Completed: 2023/9/23 12:31:47
Report time: 2023/9/23 15:36:08
Sample mass: 0.1290 g
Analysis free space: 85.5725 cm³
Low pressure dose: 12.0000 cm³/g STP
Automatic degas: No

Analysis adsorptive: N₂
Analysis bath temp.: -195.850 °C
Thermal correction: No
Ambient free space: 28.2109 cm³ Measured
Equilibration interval: 20 s
Sample density: 1.000 g/cm³

t-Plot

Harkins and Jura



Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27	Analysis adsorptive: N2
Completed: 2023/9/23 12:31:47	Analysis bath temp.: -195.850 °C
Report time: 2023/9/23 15:36:08	Thermal correction: No
Sample mass: 0.1290 g	Ambient free space: 28.2109 cm ³ Measured
Analysis free space: 85.5725 cm ³	Equilibration interval: 20 s
Low pressure dose: 12.0000 cm ³ /g STP	Sample density: 1.000 g/cm ³
Automatic degas: No	

Alpha-S Method

Primary Data

4029- At least two fitted data points are needed for Alpha-S calculations.

Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27	Analysis adsorptive: N2
Completed: 2023/9/23 12:31:47	Analysis bath temp.: -195.850 °C
Report time: 2023/9/23 15:36:08	Thermal correction: No
Sample mass: 0.1290 g	Ambient free space: 28.2109 cm ³ Measured
Analysis free space: 85.5725 cm ³	Equilibration interval: 20 s
Low pressure dose: 12.0000 cm ³ /g STP	Sample density: 1.000 g/cm ³
Automatic degas: No	

f-Ratio Method

Primary Data
A reference file has not been chosen.

Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
 Completed: 2023/9/23 12:31:47
 Report time: 2023/9/23 15:36:08
 Sample mass: 0.1290 g
 Analysis free space: 85.5725 cm³
 Low pressure dose: 12.0000 cm³/g STP
 Automatic degas: No

Analysis adsorptive: N2
 Analysis bath temp.: -195.850 °C
 Thermal correction: No
 Ambient free space: 28.2109 cm³ Measured
 Equilibration interval: 20 s
 Sample density: 1.000 g/cm³

BJH Adsorption Pore Distribution Report

Faas Correction

Harkins and Jura

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

Diameter range: 17.000 to 3,000.000 Å

Adsorbate property factor: 9.53000 Å

Density conversion factor: 0.0015468

Fraction of pores open at both ends: 0.00

Pore Diameter Range (Å)	Average Diameter (Å)	Incremental Pore Volume (cm ³ /g)	Cumulative Pore Volume (cm ³ /g)	Incremental Pore Area (m ² /g)	Cumulative Pore Area (m ² /g)
416.9 - 222.4	262.6	0.001801	0.001801	0.274	0.274
222.4 - 137.5	159.5	0.018731	0.020532	4.698	4.972
137.5 - 107.7	118.7	0.018486	0.039018	6.232	11.204
107.7 - 83.6	92.3	0.078739	0.117757	34.115	45.319
83.6 - 70.1	75.5	0.106684	0.224442	56.492	101.811
70.1 - 60.0	64.2	0.088948	0.313389	55.444	157.255
60.0 - 52.1	55.4	0.063249	0.376638	45.668	202.923
52.1 - 45.1	48.0	0.046869	0.423507	39.077	242.000
45.1 - 40.0	42.2	0.028337	0.451845	26.878	268.877
40.0 - 35.7	37.6	0.020510	0.472354	21.837	290.714
35.7 - 32.0	33.6	0.014762	0.487116	17.577	308.291
32.0 - 28.8	30.2	0.010585	0.497701	14.040	322.331
28.8 - 25.9	27.1	0.007881	0.505582	11.611	333.942
25.9 - 25.3	25.6	0.001720	0.507302	2.689	336.631
25.3 - 23.1	24.1	0.005372	0.512673	8.926	345.557
23.1 - 21.0	21.9	0.004610	0.517284	8.402	353.959
21.0 - 19.0	19.9	0.004721	0.522004	9.481	363.440
19.0 - 17.1	17.9	0.005093	0.527097	11.358	374.797

Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

Thermal correction: No

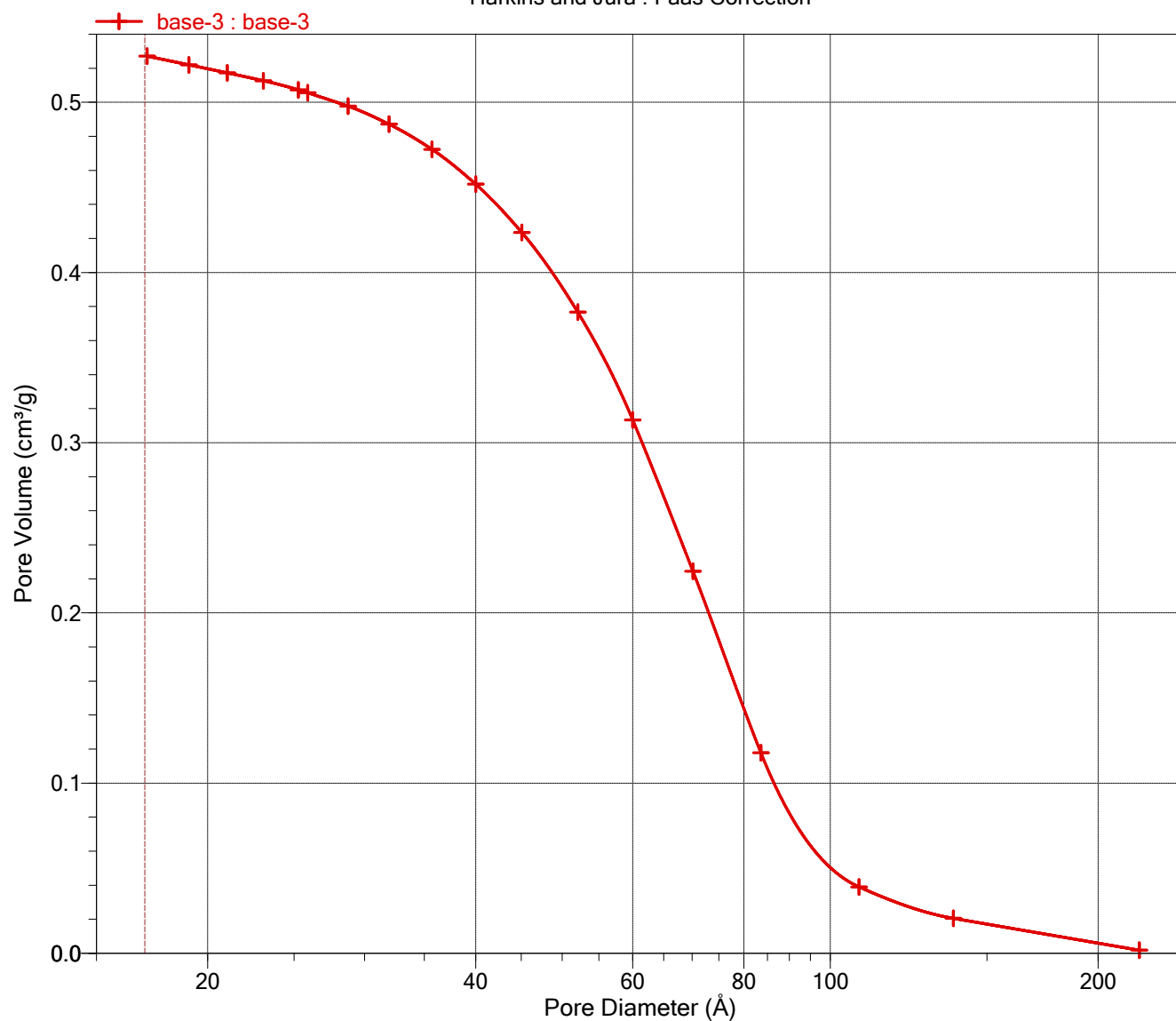
Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

BJH Adsorption Cumulative Pore Volume (Larger)

Harkins and Jura : Faas Correction



Sample: base-3

Operator:

Submitter:

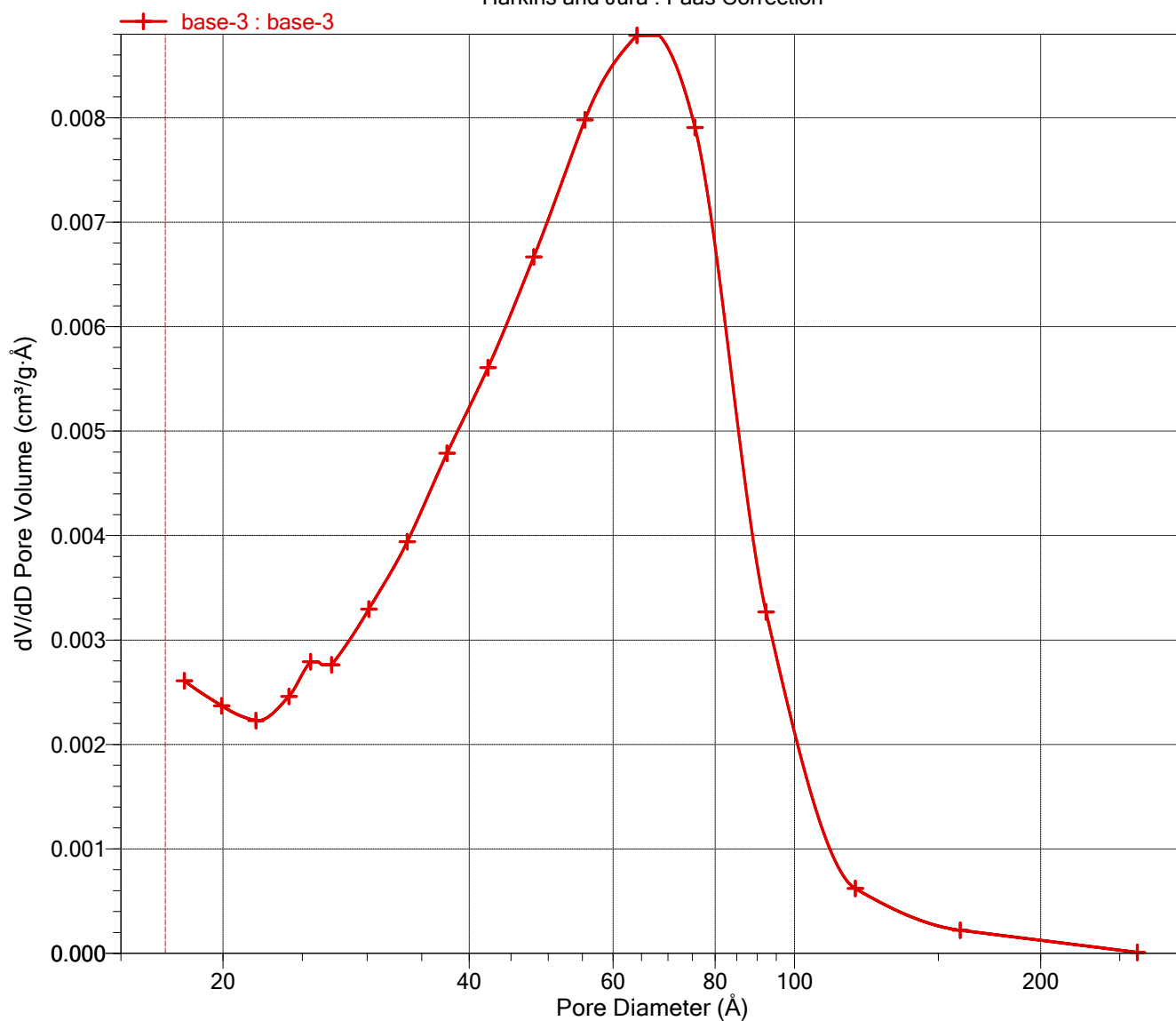
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
Completed: 2023/9/23 12:31:47
Report time: 2023/9/23 15:36:08
Sample mass: 0.1290 g
Analysis free space: 85.5725 cm³
Low pressure dose: 12.0000 cm³/g STP
Automatic degas: No

Analysis adsorptive: N₂
Analysis bath temp.: -195.850 °C
Thermal correction: No
Ambient free space: 28.2109 cm³ Measured
Equilibration interval: 20 s
Sample density: 1.000 g/cm³

BJH Adsorption dV/dD Pore Volume

Harkins and Jura : Faas Correction



Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
 Completed: 2023/9/23 12:31:47
 Report time: 2023/9/23 15:36:08
 Sample mass: 0.1290 g
 Analysis free space: 85.5725 cm³
 Low pressure dose: 12.0000 cm³/g STP
 Automatic degas: No

Analysis adsorptive: N2
 Analysis bath temp.: -195.850 °C
 Thermal correction: No
 Ambient free space: 28.2109 cm³ Measured
 Equilibration interval: 20 s
 Sample density: 1.000 g/cm³

BJH Desorption Pore Distribution Report

Faas Correction

Harkins and Jura

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

Diameter range: 17.000 to 3,000.000 Å

Adsorbate property factor: 9.53000 Å

Density conversion factor: 0.0015468

Fraction of pores open at both ends: 0.00

Pore Diameter Range (Å)	Average Diameter (Å)	Incremental Pore Volume (cm ³ /g)	Cumulative Pore Volume (cm ³ /g)	Incremental Pore Area (m ² /g)	Cumulative Pore Area (m ² /g)
347.0 - 171.0	202.4	0.002458	0.002458	0.486	0.486
171.0 - 122.6	138.3	0.002280	0.004738	0.660	1.145
122.6 - 104.2	111.7	0.003049	0.007787	1.092	2.237
104.2 - 84.5	92.0	0.026855	0.034642	11.673	13.910
84.5 - 68.4	74.6	0.015741	0.050383	8.445	22.355
68.4 - 59.9	63.5	0.044920	0.095304	28.292	50.648
59.9 - 51.6	55.0	0.171498	0.266802	124.716	175.364
51.6 - 45.2	47.9	0.167631	0.434433	139.962	315.326
45.2 - 40.4	42.5	0.058843	0.493276	55.366	370.692
40.4 - 35.8	37.8	0.031145	0.524421	32.978	403.670
35.8 - 30.9	33.0	0.015598	0.540018	18.934	422.604
30.9 - 28.9	29.8	0.002700	0.542718	3.620	426.224
28.9 - 25.8	27.1	0.002336	0.545054	3.444	429.668
25.8 - 23.0	24.2	0.000382	0.545436	0.631	430.299

Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

Thermal correction: No

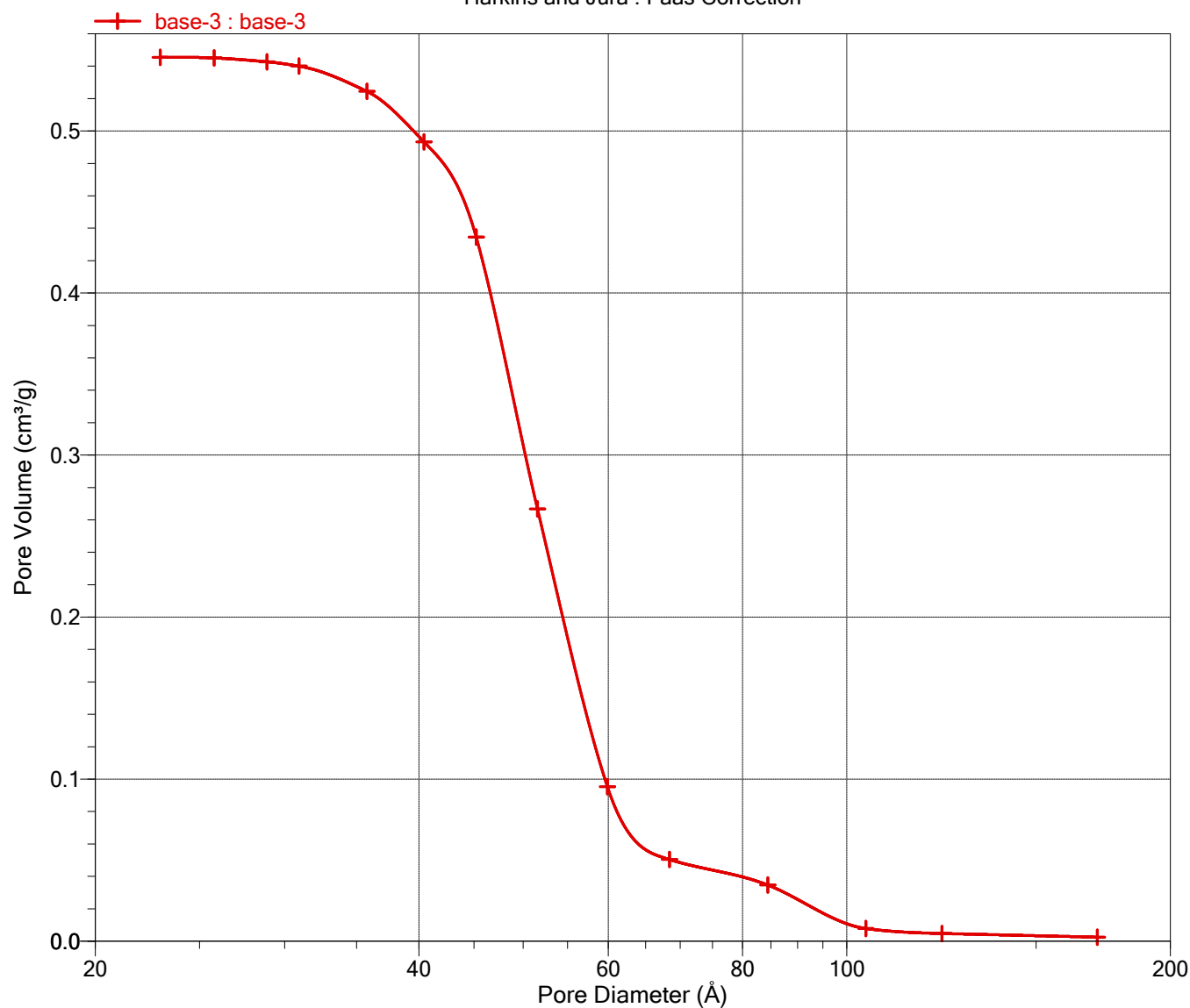
Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

BJH Desorption Cumulative Pore Volume (Larger)

Harkins and Jura : Faas Correction



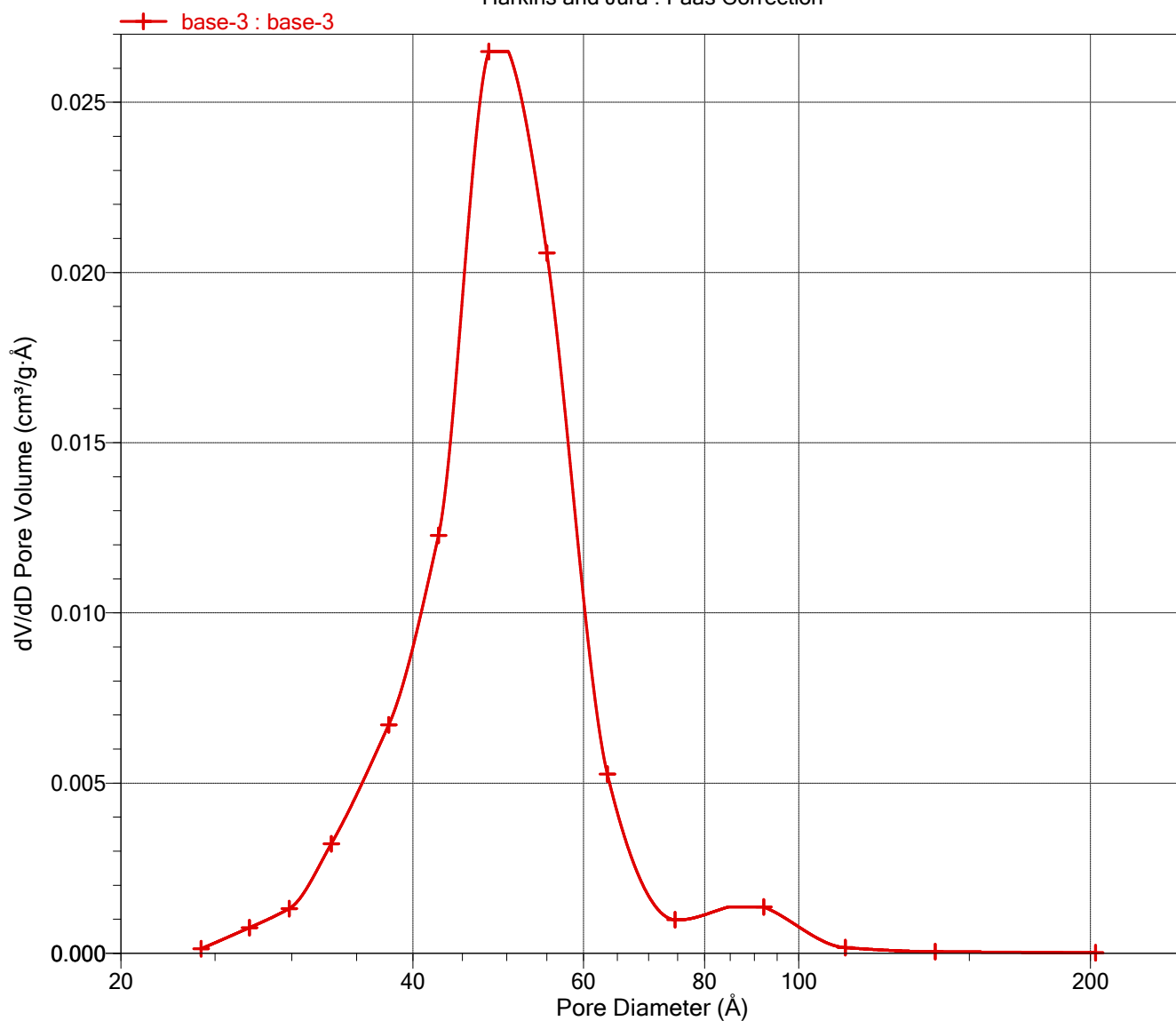
Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
Completed: 2023/9/23 12:31:47
Report time: 2023/9/23 15:36:08
Sample mass: 0.1290 g
Analysis free space: 85.5725 cm³
Low pressure dose: 12.0000 cm³/g STP
Automatic degas: No

Analysis adsorptive: N2
Analysis bath temp.: -195.850 °C
Thermal correction: No
Ambient free space: 28.2109 cm³ Measured
Equilibration interval: 20 s
Sample density: 1.000 g/cm³

BJH Desorption dV/dD Pore Volume

Harkins and Jura : Faas Correction



Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
 Completed: 2023/9/23 12:31:47
 Report time: 2023/9/23 15:36:08
 Sample mass: 0.1290 g
 Analysis free space: 85.5725 cm³
 Low pressure dose: 12.0000 cm³/g STP
 Automatic degas: No

Analysis adsorptive: N2
 Analysis bath temp.: -195.850 °C
 Thermal correction: No
 Ambient free space: 28.2109 cm³ Measured
 Equilibration interval: 20 s
 Sample density: 1.000 g/cm³

Dollimore-Heal Adsorption Pore Distribution Report

Harkins and Jura

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

Diameter range: 17.000 to 3,000.000 Å

Adsorbate property factor: 9.53000 Å

Density conversion factor: 0.0015468

Pore Diameter Range (Å)	Average Diameter (Å)	Incremental Pore Volume (cm ³ /g)	Cumulative Pore Volume (cm ³ /g)	Incremental Pore Area (m ² /g)	Cumulative Pore Area (m ² /g)
416.9 - 222.4	319.7	0.001702	0.001702	0.213	0.213
222.4 - 137.5	180.0	0.017584	0.019286	3.908	4.121
137.5 - 107.7	122.6	0.017960	0.037246	5.859	9.980
107.7 - 83.6	95.7	0.075379	0.112625	31.519	41.499
83.6 - 70.1	76.9	0.103392	0.216017	53.800	95.300
70.1 - 60.0	65.1	0.086453	0.302470	53.148	148.448
60.0 - 52.1	56.0	0.061727	0.364197	44.057	192.504
52.1 - 45.1	48.6	0.045800	0.409997	37.723	230.227
45.1 - 40.0	42.5	0.028091	0.438088	26.424	256.651
40.0 - 35.7	37.9	0.020515	0.458602	21.678	278.329
35.7 - 32.0	33.8	0.014947	0.473549	17.668	295.997
32.0 - 28.8	30.4	0.010894	0.484444	14.353	310.350
28.8 - 25.9	27.3	0.008264	0.492708	12.096	322.446
25.9 - 25.3	25.6	0.001876	0.494584	2.932	325.378
25.3 - 23.1	24.2	0.005768	0.500352	9.536	334.914
23.1 - 21.0	22.1	0.005019	0.505371	9.098	344.012
21.0 - 19.0	20.0	0.005104	0.510475	10.189	354.201
19.0 - 17.1	18.1	0.005432	0.515906	12.026	366.227

Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

Thermal correction: No

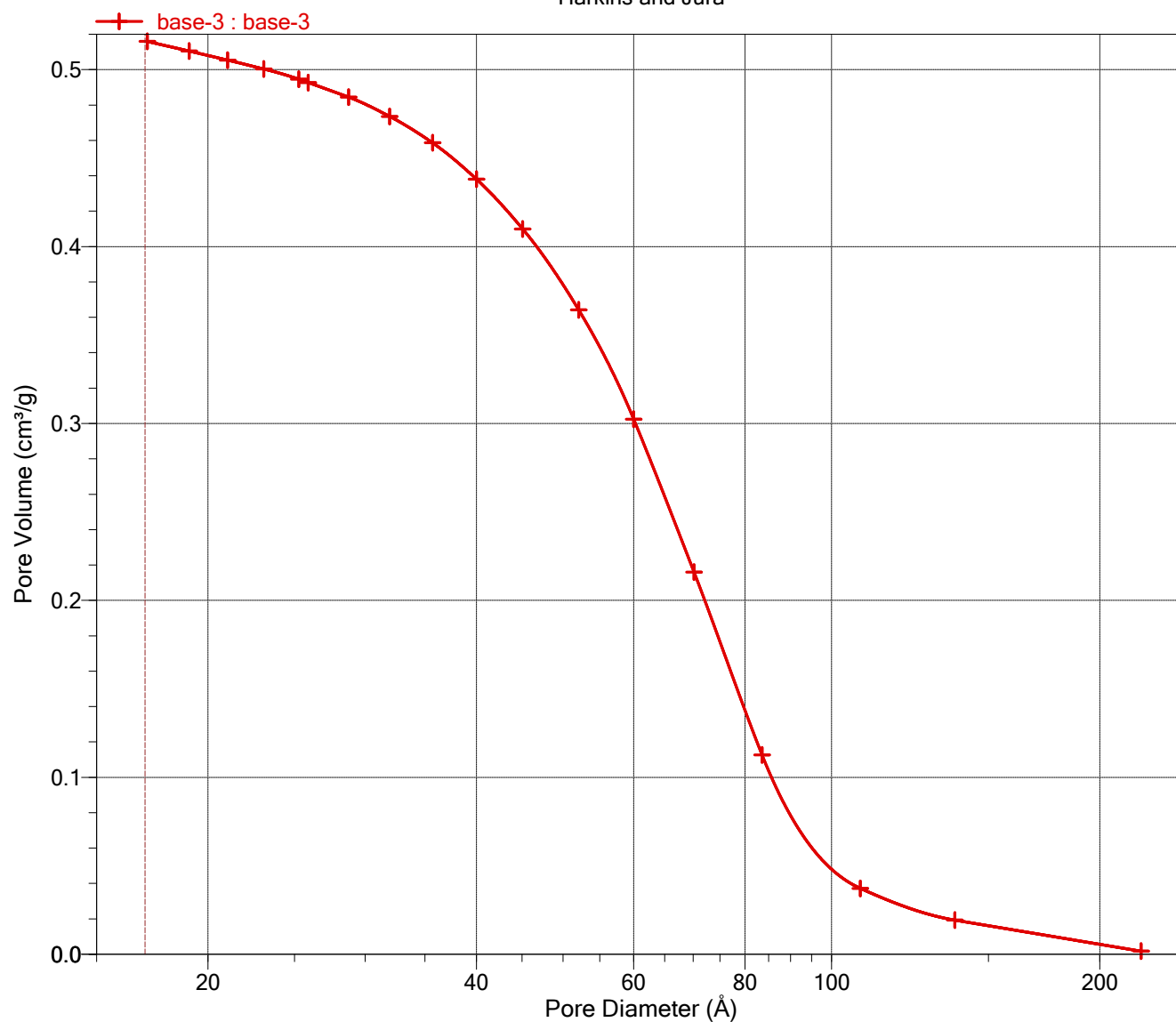
Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

Dollimore-Heal Adsorption Cumulative Pore Volume (Larger)

Harkins and Jura



Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

Thermal correction: No

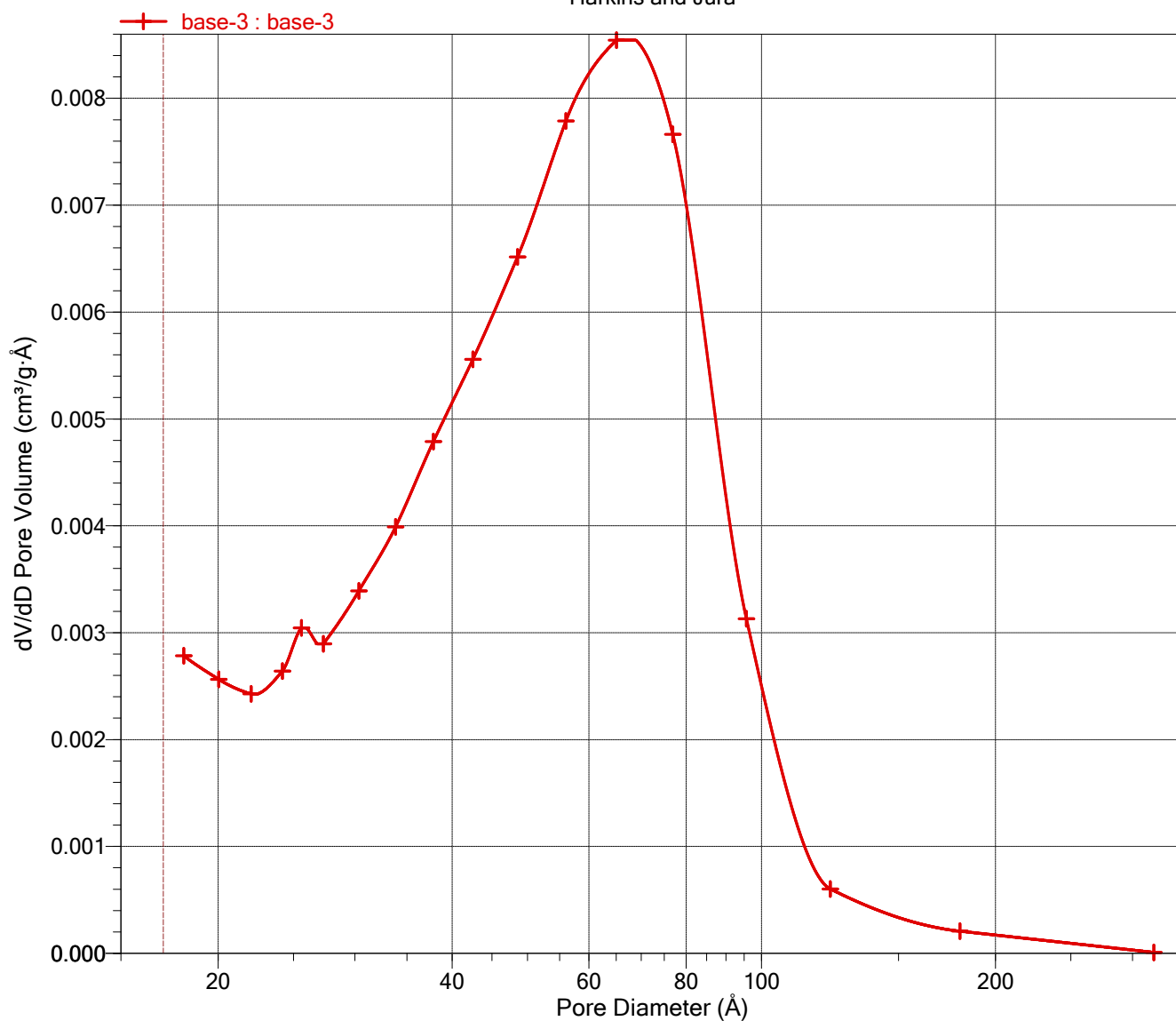
Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

Dollimore-Heal Adsorption dV/dD Pore Volume

Harkins and Jura



Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
 Completed: 2023/9/23 12:31:47
 Report time: 2023/9/23 15:36:08
 Sample mass: 0.1290 g
 Analysis free space: 85.5725 cm³
 Low pressure dose: 12.0000 cm³/g STP
 Automatic degas: No

Analysis adsorptive: N2
 Analysis bath temp.: -195.850 °C
 Thermal correction: No
 Ambient free space: 28.2109 cm³ Measured
 Equilibration interval: 20 s
 Sample density: 1.000 g/cm³

Dollimore-Heal Desorption Pore Distribution Report

Harkins and Jura

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

Diameter range: 17.000 to 3,000.000 Å

Adsorbate property factor: 9.53000 Å

Density conversion factor: 0.0015468

Pore Diameter Range (Å)	Average Diameter (Å)	Incremental Pore Volume (cm ³ /g)	Cumulative Pore Volume (cm ³ /g)	Incremental Pore Area (m ² /g)	Cumulative Pore Area (m ² /g)
347.0 - 171.0	259.0	0.002259	0.002259	0.349	0.349
171.0 - 122.6	146.8	0.002203	0.004462	0.600	0.949
122.6 - 104.2	113.4	0.003001	0.007462	1.058	2.008
104.2 - 84.5	94.3	0.025934	0.033396	10.999	13.006
84.5 - 68.4	76.4	0.015167	0.048564	7.936	20.942
68.4 - 59.9	64.2	0.043754	0.092318	27.276	48.218
59.9 - 51.6	55.7	0.165417	0.257734	118.729	166.948
51.6 - 45.2	48.4	0.162318	0.420053	134.158	301.105
45.2 - 40.4	42.8	0.057746	0.477799	53.924	355.029
40.4 - 35.8	38.1	0.030899	0.508698	32.424	387.454
35.8 - 31.0	33.4	0.015975	0.524673	19.145	406.599
31.0 - 28.9	29.9	0.003236	0.527908	4.325	410.924
28.9 - 25.8	27.4	0.003176	0.531084	4.645	415.568
25.8 - 23.0	24.4	0.001280	0.532365	2.099	417.668
23.0 - 20.5	21.7	0.000363	0.532727	0.668	418.335
20.5 - 18.0	19.2	0.000485	0.533213	1.009	419.345

Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

Thermal correction: No

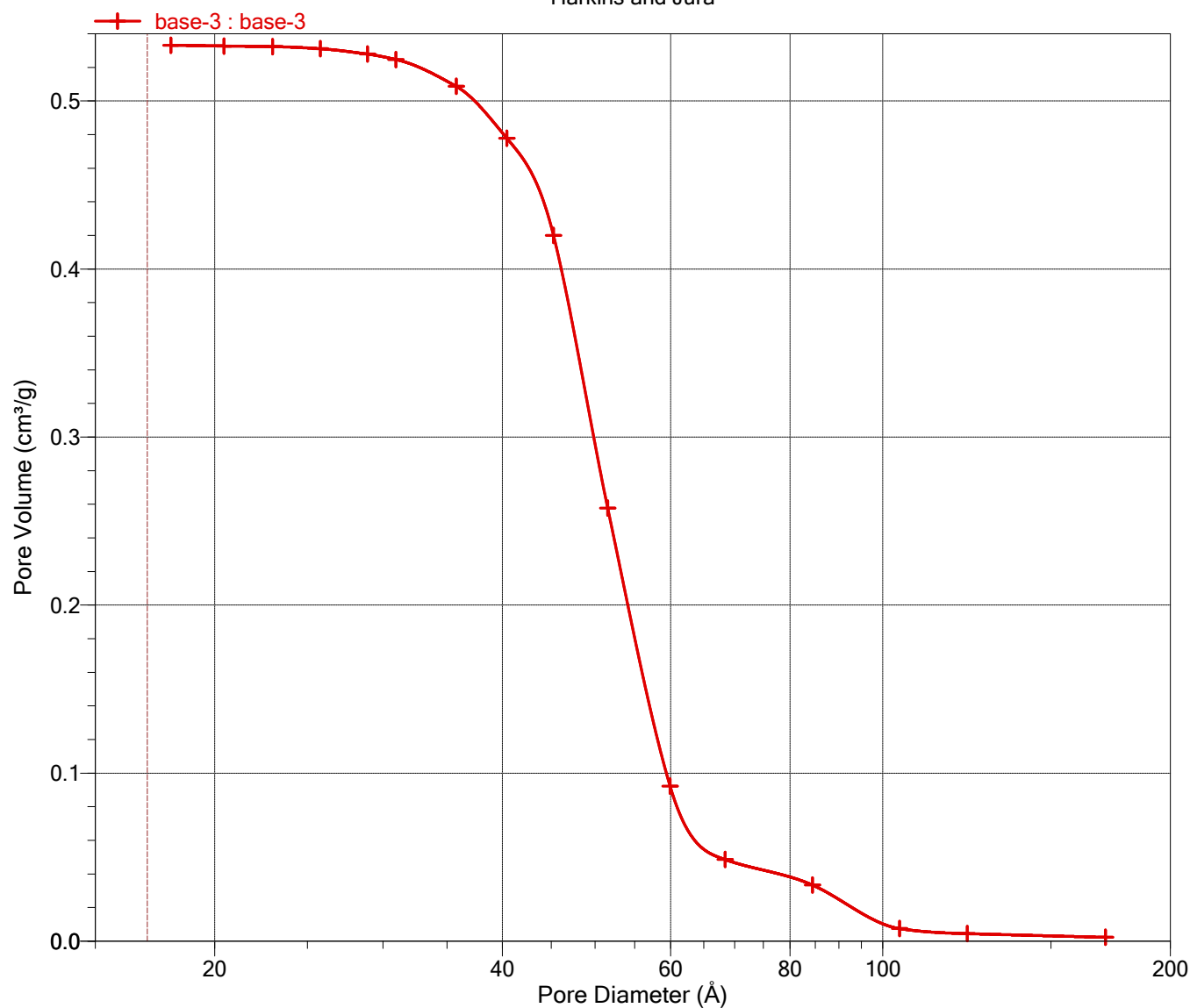
Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

Dollimore-Heal Desorption Cumulative Pore Volume (Larger)

Harkins and Jura



Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

Thermal correction: No

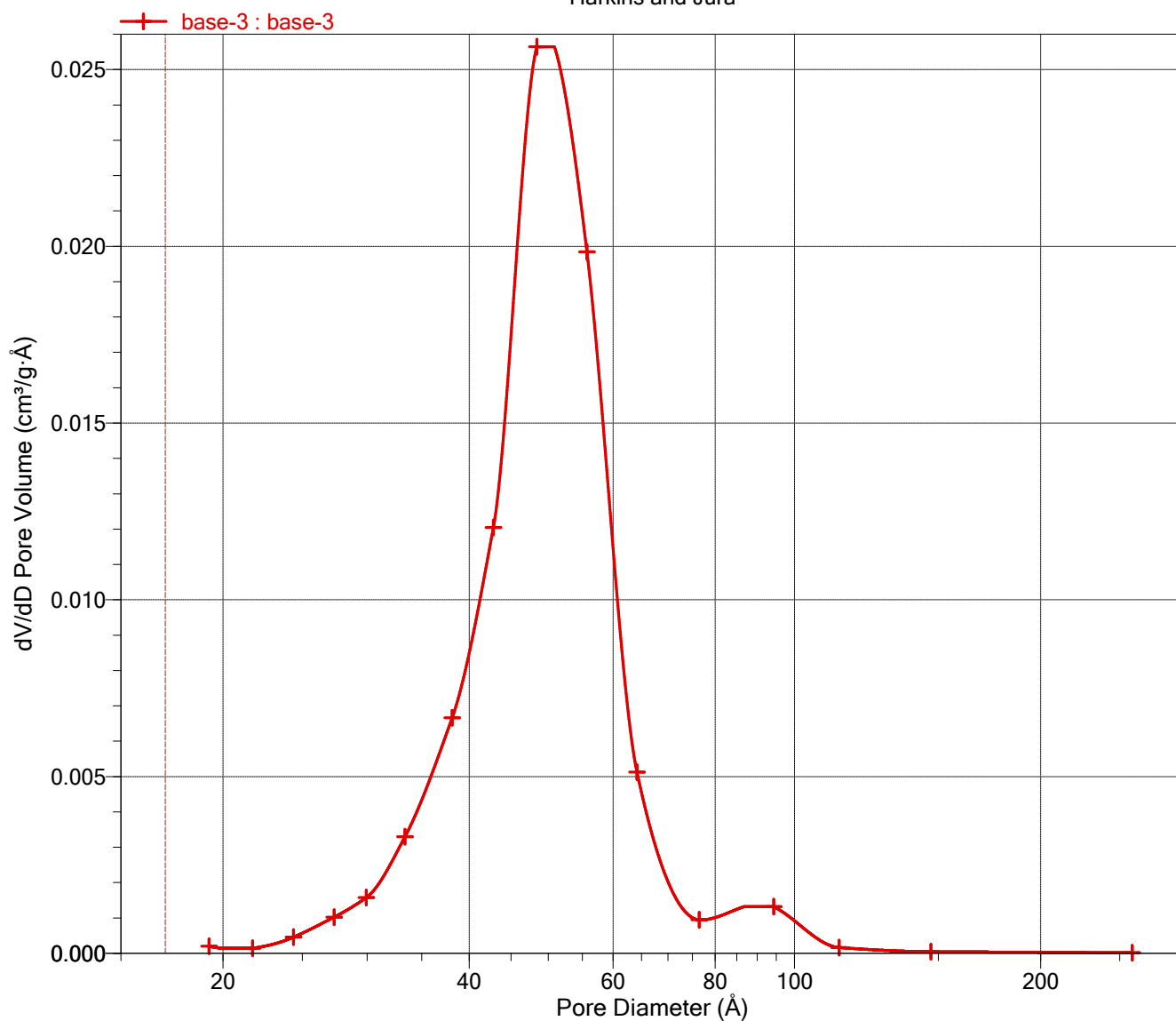
Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

Dollimore-Heal Desorption dV/dD Pore Volume

Harkins and Jura



Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
 Completed: 2023/9/23 12:31:47
 Report time: 2023/9/23 15:36:08
 Sample mass: 0.1290 g
 Analysis free space: 85.5725 cm³
 Low pressure dose: 12.0000 cm³/g STP
 Automatic degas: No

Analysis adsorptive: N2
 Analysis bath temp.: -195.850 °C
 Thermal correction: No
 Ambient free space: 28.2109 cm³ Measured
 Equilibration interval: 20 s
 Sample density: 1.000 g/cm³

Horvath-Kawazoe Report

Slit Pore Geometry (Original H-K)

Maximum pore volume: 0.164164 cm³/g
 at Relative Pressure: 0.168787460
 Median pore width: 7.325 Å
 Relative pressure range: 1e-09 to 0.18

Diameter of adsorptive molecule: 3.000 Å
 Diameter of adsorptive at zero interaction energy: 2.574 Å
 Adsorptive density: 6.710e+14 molecules/cm²
 Adsorptive dispersion constant: 7.777e-59
 Diameter of sample atom: 3.400 Å
 Diameter of sample atom at zero interaction energy: 2.918 Å
 Sample Density: 3.845e+15 molecules/cm²
 Sample dispersion constant: 6.036e-59

Density conversion factor: 0.0015468

Absolute Pressure (mmHg)	Relative Pressure (P/Po)	Quantity Adsorbed (cm ³ /g STP)	Pore Width (Å)	Cumulative Pore Volume (cm ³ /g)	Differential Pore Volume (cm ³ /g·Å)
0.01301	0.000017012	11.67603	4.221	0.0181	0.0043
8.45086	0.011056415	63.82586	7.834	0.0987	0.0223
23.75153	0.031073031	76.05763	9.485	0.1176	0.0115
38.54842	0.050426735	82.92484	10.631	0.1283	0.0093
76.19545	0.099671748	94.47300	13.016	0.1461	0.0075
98.61732	0.128992469	99.76873	14.329	0.1543	0.0062
129.02315	0.168787460	106.13141	16.085	0.1642	0.0056

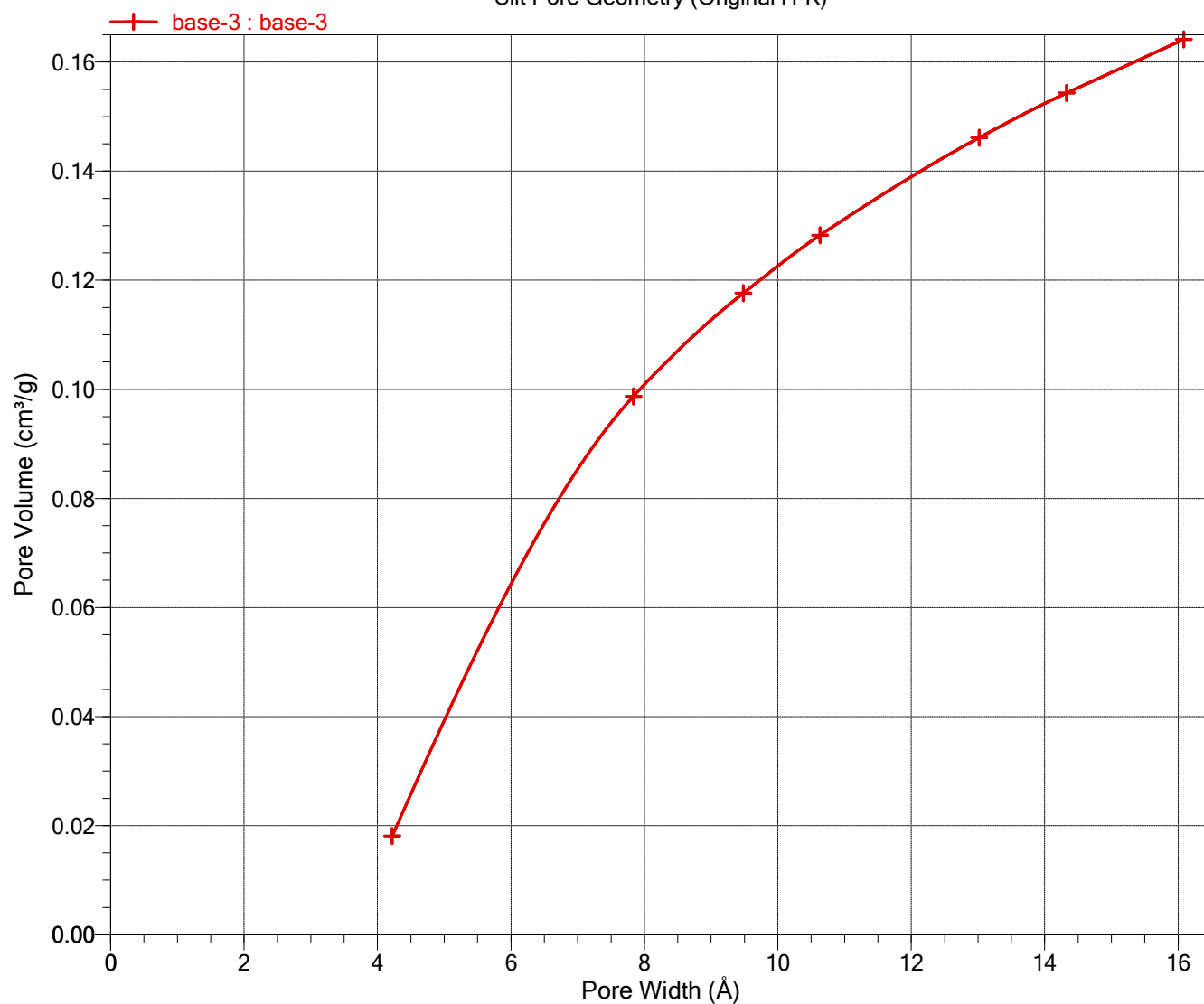
Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
Completed: 2023/9/23 12:31:47
Report time: 2023/9/23 15:36:08
Sample mass: 0.1290 g
Analysis free space: 85.5725 cm³
Low pressure dose: 12.0000 cm³/g STP
Automatic degas: No

Analysis adsorptive: N2
Analysis bath temp.: -195.850 °C
Thermal correction: No
Ambient free space: 28.2109 cm³ Measured
Equilibration interval: 20 s
Sample density: 1.000 g/cm³

Horvath-Kawazoe Cumulative Pore Volume Plot

Slit Pore Geometry (Original H-K)



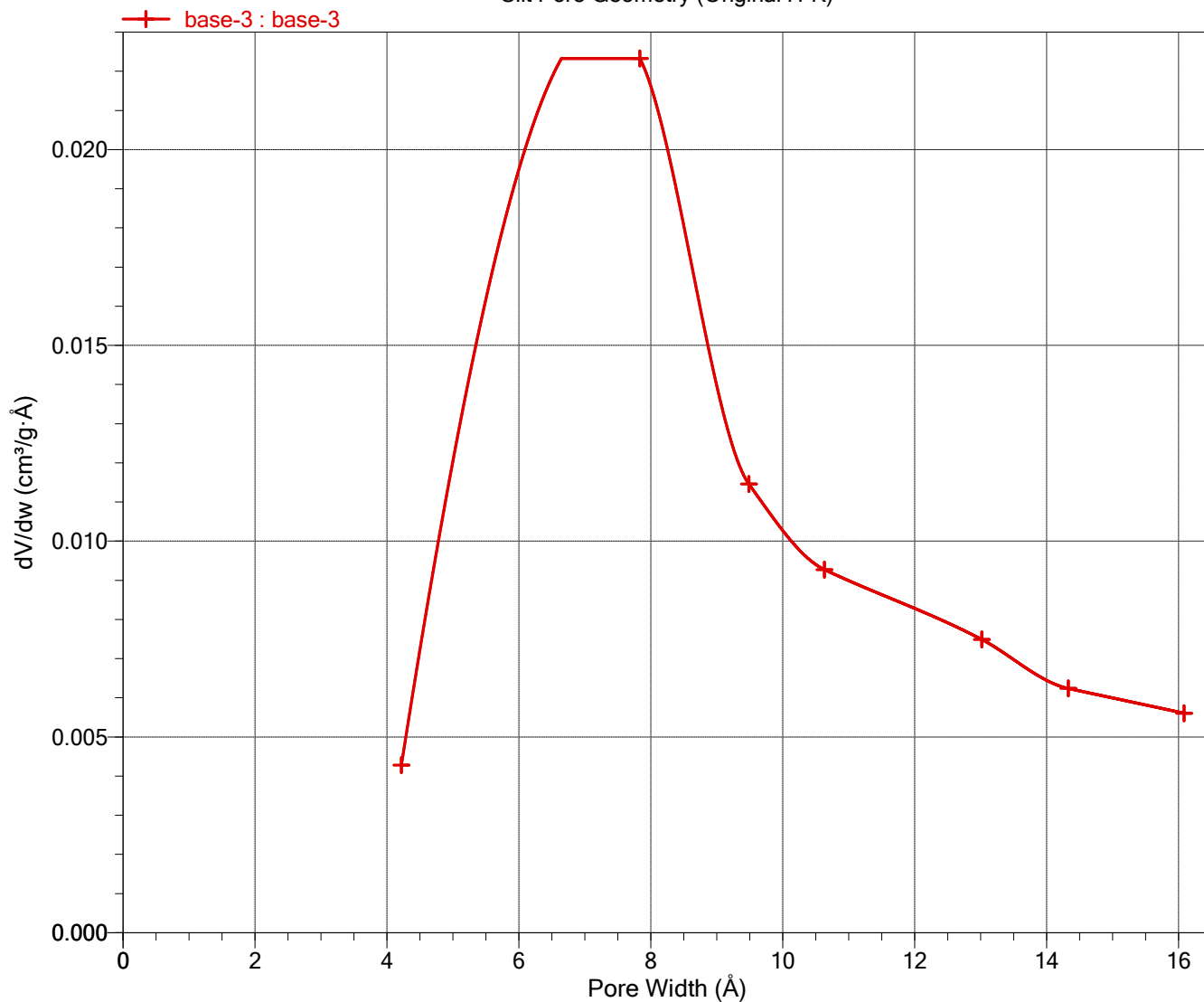
Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
Completed: 2023/9/23 12:31:47
Report time: 2023/9/23 15:36:08
Sample mass: 0.1290 g
Analysis free space: 85.5725 cm³
Low pressure dose: 12.0000 cm³/g STP
Automatic degas: No

Analysis adsorptive: N₂
Analysis bath temp.: -195.850 °C
Thermal correction: No
Ambient free space: 28.2109 cm³ Measured
Equilibration interval: 20 s
Sample density: 1.000 g/cm³

Horvath-Kawazoe Differential Pore Volume Plot

Slit Pore Geometry (Original H-K)



Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27	Analysis adsorptive: N2
Completed: 2023/9/23 12:31:47	Analysis bath temp.: -195.850 °C
Report time: 2023/9/23 15:36:08	Thermal correction: No
Sample mass: 0.1290 g	Ambient free space: 28.2109 cm ³ Measured
Analysis free space: 85.5725 cm ³	Equilibration interval: 20 s
Low pressure dose: 12.0000 cm ³ /g STP	Sample density: 1.000 g/cm ³
Automatic degas: No	

NLDFT Advanced PSD Reports

Primary Data
4070- Unable to load deconvolution model Invalid.

Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

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Analysis adsorptive: N2
 Analysis bath temp.: -195.850 °C
 Thermal correction: No
 Ambient free space: 28.2109 cm³ Measured
 Equilibration interval: 20 s
 Sample density: 1.000 g/cm³

Porosity Distribution by Original Density Functional Theory

Model: N2 - DFT Model

Method: Non-negative Regularization: 0.00000

Standard Deviation of Fit: 4.36470 cm³/g STP

Volume in Pores	<	8.04 Å	:	0.00000 cm ³ /g
Total Volume in Pores	<=	4,003.09 Å	:	0.54361 cm ³ /g
Total Area in Pores	>=	8.04 Å	:	238.864 m ² /g

Pore Table

Pore Width (Å)	Cumulative Pore Volume (cm ³ /g)	Incremental Pore Volume (cm ³ /g)	Cumulative Pore Area (m ² /g)	Incremental Pore Area (m ² /g)
8.04	0.00000	0.00000	0.000	0.000
8.58	0.00000	0.00000	0.000	0.000
9.29	0.00000	0.00000	0.000	0.000
10.01	0.00000	0.00000	0.000	0.000
10.90	0.00000	0.00000	0.000	0.000
11.79	0.00000	0.00000	0.000	0.000
12.69	0.00000	0.00000	0.000	0.000
13.58	0.03507	0.03507	51.639	51.639
14.83	0.04498	0.00991	65.007	13.368
15.91	0.04562	0.00064	65.807	0.799
17.16	0.05600	0.01038	77.904	12.098
18.59	0.05600	0.00000	77.904	0.000
20.02	0.05600	0.00000	77.904	0.000
21.62	0.05600	0.00000	77.904	0.000
23.41	0.05635	0.00035	78.204	0.300
25.20	0.06149	0.00515	82.289	4.085
27.34	0.06893	0.00744	87.728	5.440
29.49	0.07498	0.00605	91.835	4.107
31.81	0.08299	0.00800	96.868	5.032
34.31	0.09220	0.00922	102.240	5.372
36.99	0.10137	0.00916	107.192	4.952
40.03	0.11532	0.01395	114.163	6.971
43.25	0.13308	0.01776	122.378	8.215
46.64	0.15689	0.02381	132.586	10.208
50.40	0.18577	0.02889	144.050	11.464
54.33	0.22208	0.03631	157.416	13.367
58.80	0.26660	0.04452	172.559	15.143
63.44	0.31815	0.05155	188.812	16.252
68.45	0.37410	0.05594	205.158	16.346
73.99	0.41591	0.04181	216.462	11.304
79.88	0.44827	0.03236	224.563	8.102
86.32	0.47522	0.02695	230.807	6.244
93.11	0.48833	0.01311	233.623	2.816
100.61	0.49403	0.00570	234.757	1.134
108.66	0.49840	0.00437	235.561	0.805
117.23	0.50198	0.00358	236.172	0.610
126.53	0.50512	0.00314	236.668	0.497
136.71	0.50790	0.00278	237.075	0.406

Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

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Analysis adsorptive: N2
 Analysis bath temp.: -195.850 °C
 Thermal correction: No
 Ambient free space: 28.2109 cm³ Measured
 Equilibration interval: 20 s
 Sample density: 1.000 g/cm³

Pore Table				
Pore Width (Å)	Cumulative Pore Volume (cm ³ /g)	Incremental Pore Volume (cm ³ /g)	Cumulative Pore Area (m ² /g)	Incremental Pore Area (m ² /g)
147.61	0.51035	0.00245	237.406	0.332
159.41	0.51250	0.00215	237.676	0.270
172.10	0.51321	0.00072	237.759	0.083
185.86	0.51321	0.00000	237.759	0.000
200.69	0.51321	0.00000	237.759	0.000
216.60	0.51321	0.00000	237.759	0.000
233.93	0.51321	0.00000	237.759	0.000
252.52	0.51321	0.00000	237.759	0.000
272.71	0.51321	0.00000	237.759	0.000
294.51	0.51321	0.00000	237.759	0.000
317.92	0.51518	0.00197	237.883	0.124
343.30	0.51803	0.00284	238.049	0.166
370.64	0.52061	0.00258	238.188	0.139
400.31	0.52295	0.00234	238.305	0.117
432.30	0.52455	0.00160	238.379	0.074
466.79	0.52606	0.00151	238.444	0.065
503.96	0.52788	0.00183	238.516	0.073
544.17	0.52954	0.00166	238.577	0.061
587.60	0.53067	0.00113	238.616	0.038
634.42	0.53173	0.00106	238.649	0.034
684.99	0.53303	0.00129	238.687	0.038
739.68	0.53391	0.00088	238.711	0.024
798.65	0.53474	0.00083	238.732	0.021
862.45	0.53575	0.00101	238.755	0.023
931.26	0.53667	0.00092	238.775	0.020
1005.60	0.53730	0.00063	238.787	0.012
1085.66	0.53789	0.00059	238.798	0.011
1172.33	0.53860	0.00072	238.810	0.012
1265.80	0.53909	0.00049	238.818	0.008
1366.77	0.53955	0.00046	238.825	0.007
1475.96	0.54012	0.00056	238.832	0.008
1593.55	0.54050	0.00038	238.837	0.005
1720.79	0.54086	0.00036	238.841	0.004
1858.04	0.54130	0.00044	238.846	0.005
2006.19	0.54160	0.00030	238.849	0.003
2166.32	0.54189	0.00028	238.852	0.003
2339.13	0.54215	0.00026	238.854	0.002
2525.70	0.54239	0.00024	238.856	0.002
2727.29	0.54269	0.00030	238.858	0.002
2944.78	0.54289	0.00020	238.859	0.001
3179.78	0.54308	0.00019	238.861	0.001
3433.37	0.54332	0.00023	238.862	0.001
3707.33	0.54348	0.00016	238.863	0.001
4003.09	0.54361	0.00013	238.864	0.001

Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

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 Sample density: 1.000 g/cm³

Porosity Distribution by Original Density Functional Theory

Model: N2 - DFT Model

Method: Non-negative Regularization: 0.00000

Standard Deviation of Fit: 4.36470 cm³/g STP

Isotherm Table

Relative Pressure (P/Po)	Experimental Quantity Adsorbed (cm ³ /g STP)	Fitted Quantity Adsorbed (cm ³ /g STP)	Absolute Residual (cm ³ /g STP)	Relative Residual
0.000026102	11.7377	2.2629	9.4748	0.807210
0.000042841	11.8511	3.8948	7.9563	0.671353
0.000068697	12.0264	6.6935	5.3329	0.443436
0.000107744	12.2910	11.3247	0.9663	0.078617
0.000165451	12.6820	17.6015	-4.9195	-0.387916
0.000249000	13.2476	23.7303	-10.4826	-0.791282
0.000367617	14.0499	28.6859	-14.6359	-1.041709
0.000532902	15.1661	32.5883	-17.4222	-1.148758
0.000759152	16.6899	35.7347	-19.0448	-1.141096
0.001063641	18.7316	38.3462	-19.6146	-1.047139
0.001466847	21.4152	40.5713	-19.1561	-0.894509
0.001992604	24.8712	42.5126	-17.6414	-0.709308
0.002668156	29.2208	44.2453	-15.0246	-0.514174
0.003524104	34.5443	45.8290	-11.2847	-0.326673
0.004594232	40.8253	47.3166	-6.4913	-0.159002
0.005915212	47.8518	48.7648	-0.9130	-0.019080
0.007526182	55.0523	50.2586	4.7938	0.087076
0.009468212	61.2325	60.1820	1.0505	0.017156
0.011783670	64.4395	62.0841	2.3554	0.036553
0.014515520	66.6337	63.7359	2.8978	0.043488
0.017706521	68.9723	67.8405	1.1318	0.016409
0.021398440	71.3715	69.3798	1.9916	0.027905
0.025631230	73.7104	70.8824	2.8280	0.038366
0.030442240	75.8241	72.5692	3.2549	0.042927
0.035865448	77.8666	74.1702	3.6965	0.047472
0.041930798	80.1913	78.9407	1.2506	0.015595
0.048663601	82.4451	80.7415	1.7036	0.020663
0.056084011	84.3706	82.6762	1.6944	0.020082
0.064206667	86.4334	84.7833	1.6500	0.019090
0.073040441	88.6243	87.0715	1.5528	0.017521
0.082588248	90.8827	89.5028	1.3799	0.015184
0.092847057	93.1224	91.9923	1.1301	0.012136
0.103808001	95.2529	94.4406	0.8123	0.008528
0.115456402	97.4181	96.7748	0.6433	0.006604
0.127772301	99.5680	98.9635	0.6045	0.006071
0.140730694	101.6875	101.0072	0.6804	0.006691
0.154301897	103.8788	103.0276	0.8512	0.008194
0.168452203	106.0807	104.8355	1.2453	0.011739
0.183144197	108.2957	108.1677	0.1280	0.001182
0.198337302	110.5598	109.8180	0.7418	0.006710
0.213988706	112.8392	111.4255	1.4137	0.012529

Sample: base-3

Operator:

Submitter:

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 Automatic degas: No

Analysis adsorptive: N2
 Analysis bath temp.: -195.850 °C
 Thermal correction: No
 Ambient free space: 28.2109 cm³ Measured
 Equilibration interval: 20 s
 Sample density: 1.000 g/cm³

Isotherm Table

Relative Pressure (P/Po)	Experimental Quantity Adsorbed (cm ³ /g STP)	Fitted Quantity Adsorbed (cm ³ /g STP)	Absolute Residual (cm ³ /g STP)	Relative Residual
0.230053306	115.1442	115.4331	-0.2889	-0.002509
0.246484801	117.5051	116.9921	0.5129	0.004365
0.263235897	119.9331	118.5600	1.3731	0.011449
0.280259013	122.4208	122.1714	0.2494	0.002037
0.297506303	125.0041	123.7880	1.2162	0.009729
0.314930797	127.6721	128.2248	-0.5527	-0.004329
0.332486212	130.3801	129.9383	0.4418	0.003388
0.350127310	133.1194	131.7298	1.3897	0.010439
0.367810607	136.0177	136.8350	-0.8173	-0.006008
0.385494202	139.0894	138.7344	0.3550	0.002553
0.403138310	142.2377	140.6820	1.5557	0.010937
0.420704991	145.5753	145.8887	-0.3134	-0.002152
0.438158900	149.0824	147.7923	1.2901	0.008653
0.455466807	152.7286	154.7306	-2.0020	-0.013108
0.472598106	156.6798	156.4771	0.2028	0.001294
0.489524394	160.8302	158.1650	2.6652	0.016572
0.506219923	165.1433	166.3786	-1.2353	-0.007480
0.522661209	169.8362	167.9005	1.9357	0.011397
0.538827300	174.7601	178.4652	-3.7051	-0.021201
0.554699600	179.8908	179.8501	0.0407	0.000226
0.570261598	185.5527	181.2218	4.3310	0.023341
0.585499227	191.6054	193.8417	-2.2363	-0.011671
0.600400090	197.8826	195.1263	2.7563	0.013929
0.614954293	204.6494	210.9442	-6.2947	-0.030759
0.629153311	212.1376	212.1483	-0.0107	-0.000050
0.642990828	220.2336	213.3756	6.8579	0.031139
0.656461716	228.8803	232.7490	-3.8687	-0.016903
0.669562697	238.1370	233.8678	4.2692	0.017927
0.682291925	247.7499	256.4538	-8.7039	-0.035132
0.694648683	257.4627	257.4043	0.0584	0.000227
0.706633508	267.4390	258.3425	9.0965	0.034013
0.718248010	278.0895	282.8594	-4.7700	-0.017153
0.729494929	288.6471	283.5743	5.0728	0.017574
0.740377605	298.4299	302.3085	-3.8786	-0.012997
0.750900388	306.9907	302.8600	4.1307	0.013456
0.761068285	314.6397	317.6619	-3.0222	-0.009605
0.770887017	321.3350	318.0965	3.2386	0.010078
0.780362606	326.9671	330.6567	-3.6896	-0.011284
0.789501607	331.4609	331.0022	0.4587	0.001384
0.798311174	334.7712	331.3359	3.4352	0.010261
0.806798697	336.9710	337.6513	-0.6803	-0.002019
0.814971626	338.7706	337.9352	0.8354	0.002466
0.822837889	340.3558	340.8663	-0.5105	-0.001500
0.830405474	341.7654	341.1195	0.6458	0.001890
0.837682605	343.0322	343.4358	-0.4037	-0.001177
0.844677329	344.1842	343.6622	0.5220	0.001517

Sample: base-3

Operator:

Submitter:

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 Sample density: 1.000 g/cm³

Isotherm Table

Relative Pressure (P/Po)	Experimental Quantity Adsorbed (cm ³ /g STP)	Fitted Quantity Adsorbed (cm ³ /g STP)	Absolute Residual (cm ³ /g STP)	Relative Residual
0.851397991	345.2505	345.6017	-0.3512	-0.001017
0.857852995	346.2596	345.8029	0.4568	0.001319
0.864050388	347.2150	347.5304	-0.3154	-0.000908
0.869998574	348.1189	347.7083	0.4106	0.001180
0.875705481	348.9735	349.2565	-0.2831	-0.000811
0.881179392	349.7811	349.4140	0.3671	0.001049
0.886428118	350.5438	350.7961	-0.2523	-0.000720
0.891459525	351.2639	350.9364	0.3275	0.000932
0.896281302	351.9434	352.1676	-0.2241	-0.000637
0.900900900	352.5845	352.2933	0.2912	0.000826
0.905325770	353.1891	352.7841	0.4050	0.001147
0.909563184	353.6762	352.8992	0.7770	0.002197
0.913620114	353.7761	353.0100	0.7661	0.002166
0.917503417	353.5953	353.1166	0.4787	0.001354
0.921219707	353.4213	353.2193	0.2020	0.000572
0.924775481	353.4213	353.3181	0.1032	0.000292
0.928177178	353.4213	353.4129	0.0084	0.000024
0.931430817	353.4213	353.5037	-0.0824	-0.000233
0.934542298	353.4213	353.5907	-0.1694	-0.000479
0.937517405	353.4213	353.6738	-0.2525	-0.000715
0.940361619	353.4213	353.7535	-0.3322	-0.000940
0.943080306	353.4213	353.8301	-0.4088	-0.001157
0.945678592	353.4213	353.9037	-0.4825	-0.001365
0.948161721	353.4213	353.9749	-0.5536	-0.001566
0.950534225	353.8937	354.0438	-0.1502	-0.000424
0.952800930	354.8117	355.2161	-0.4045	-0.001140
0.954966187	355.7151	355.2797	0.4354	0.001224
0.957034409	356.5781	356.9474	-0.3693	-0.001036
0.959009588	357.4022	357.0049	0.3973	0.001112
0.960896015	358.1893	358.5266	-0.3373	-0.000942
0.962697208	358.9409	358.5780	0.3629	0.001011
0.964416981	359.6584	359.9667	-0.3083	-0.000857
0.966058910	360.3435	360.0121	0.3315	0.000920
0.967626274	360.9975	360.9768	0.0207	0.000057
0.969122529	361.6218	361.8911	-0.2693	-0.000745
0.970550597	362.2177	361.9293	0.2884	0.000796
0.971913695	362.7864	363.0318	-0.2454	-0.000676
0.973214507	363.3292	363.0663	0.2629	0.000724
0.974455774	363.8471	364.0706	-0.2235	-0.000614
0.975640416	364.3414	364.1019	0.2395	0.000657
0.976770699	364.8130	364.7986	0.0144	0.000039
0.977849126	365.2630	365.4576	-0.1946	-0.000533
0.978878021	365.6923	365.4843	0.2080	0.000569
0.979859591	366.1018	366.2792	-0.1774	-0.000484
0.980795979	366.4925	366.3030	0.1896	0.000517
0.981689274	366.8653	366.8542	0.0110	0.000030

Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
 Completed: 2023/9/23 12:31:47
 Report time: 2023/9/23 15:36:08
 Sample mass: 0.1290 g
 Analysis free space: 85.5725 cm³
 Low pressure dose: 12.0000 cm³/g STP
 Automatic degas: No

Analysis adsorptive: N2
 Analysis bath temp.: -195.850 °C
 Thermal correction: No
 Ambient free space: 28.2109 cm³ Measured
 Equilibration interval: 20 s
 Sample density: 1.000 g/cm³

Isotherm Table

Relative Pressure (P/Po)	Experimental Quantity Adsorbed (cm ³ /g STP)	Fitted Quantity Adsorbed (cm ³ /g STP)	Absolute Residual (cm ³ /g STP)	Relative Residual
0.982541502	367.2209	367.3752	-0.1543	-0.000420
0.983354270	367.5600	367.3954	0.1646	0.000448
0.984129488	367.8834	368.0238	-0.1404	-0.000382
0.984869003	368.1920	368.0422	0.1498	0.000407
0.985574186	368.4862	368.6139	-0.1277	-0.000346
0.986246824	368.7669	368.6306	0.1363	0.000370
0.986888289	369.0346	369.0267	0.0078	0.000021
0.987500012	369.2898	369.4008	-0.1110	-0.000301
0.988083303	369.5332	369.4149	0.1183	0.000320
0.988639593	369.7653	369.8663	-0.1010	-0.000273
0.989170074	369.9866	369.8790	0.1077	0.000291
0.989675879	370.1977	370.1916	0.0061	0.000016
0.990158200	370.3989	370.4865	-0.0876	-0.000237
0.990618110	370.5908	370.4975	0.0933	0.000252
0.991056621	370.7738	370.8535	-0.0797	-0.000215
0.991474688	370.9482	370.8634	0.0849	0.000229
0.991873324	371.1145	371.1098	0.0047	0.000013
0.992253423	371.2731	371.3423	-0.0692	-0.000186
0.992615700	371.4243	371.3508	0.0736	0.000198
0.992961228	371.5685	371.6314	-0.0629	-0.000169
0.993290603	371.7059	371.6390	0.0669	0.000180
0.993604600	371.8369	371.8332	0.0037	0.000010
0.993903875	371.9618	372.0164	-0.0546	-0.000147
0.994189322	372.0809	372.0229	0.0580	0.000156
0.994461298	372.1944	372.1912	0.0031	0.000008
0.994720697	372.3026	372.3499	-0.0473	-0.000127
0.994967878	372.4057	372.3555	0.0502	0.000135
0.995203614	372.5041	372.5471	-0.0430	-0.000115
0.995428324	372.5979	372.5522	0.0457	0.000123
0.995642424	372.6872	372.6847	0.0025	0.000007
0.995846629	372.7724	372.8097	-0.0373	-0.000100
0.996041179	372.8536	372.8140	0.0396	0.000106
0.996226728	372.9310	372.9649	-0.0339	-0.000091
0.996403575	373.0048	372.9688	0.0360	0.000097
0.996572077	373.0751	373.0732	0.0019	0.000005
0.996732771	373.1421	373.1605	-0.0184	-0.000049
0.996885896	373.2060	373.1639	0.0422	0.000113

Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

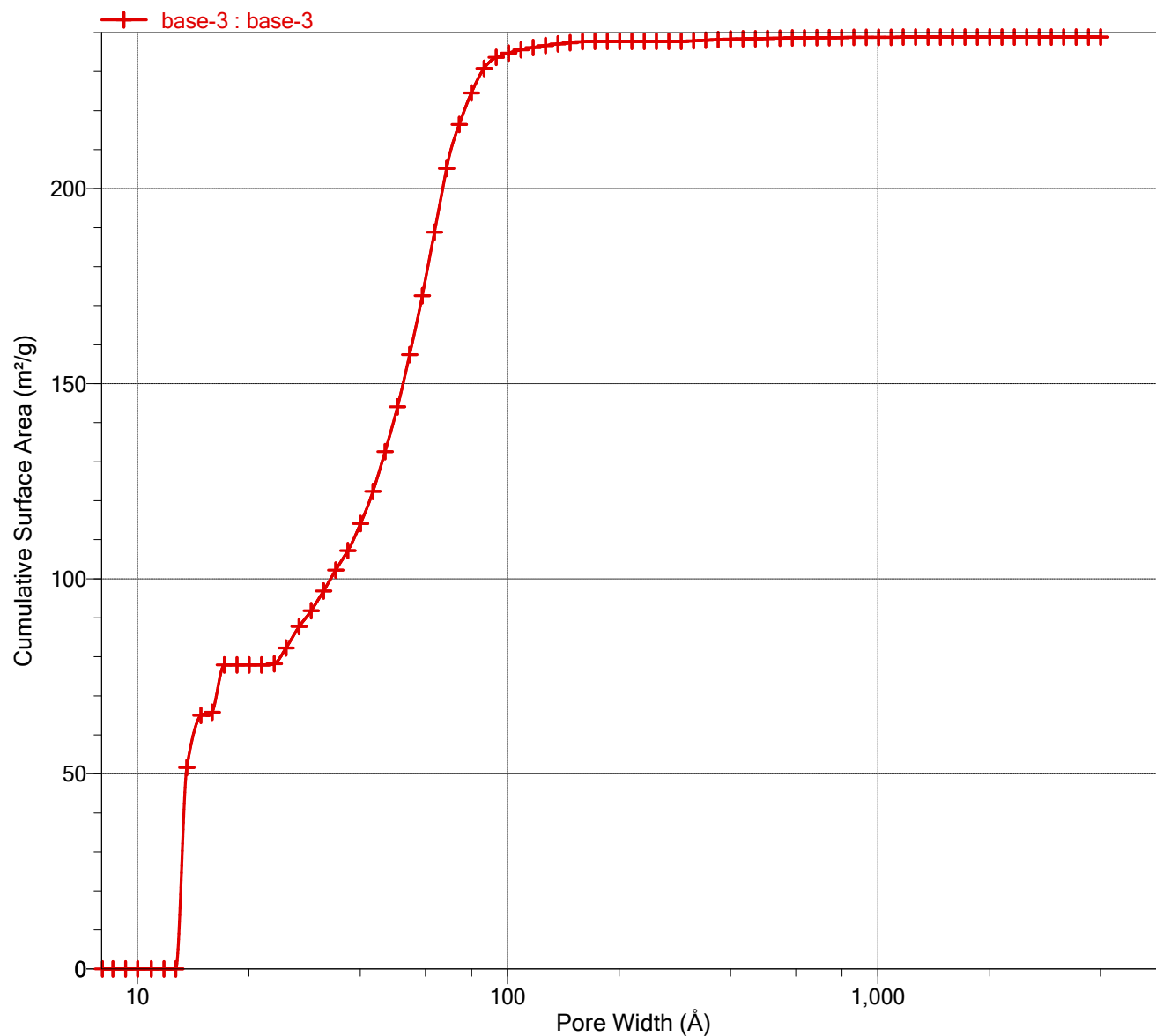
Thermal correction: No

Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

Cumulative Surface Area vs. Pore Width



Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

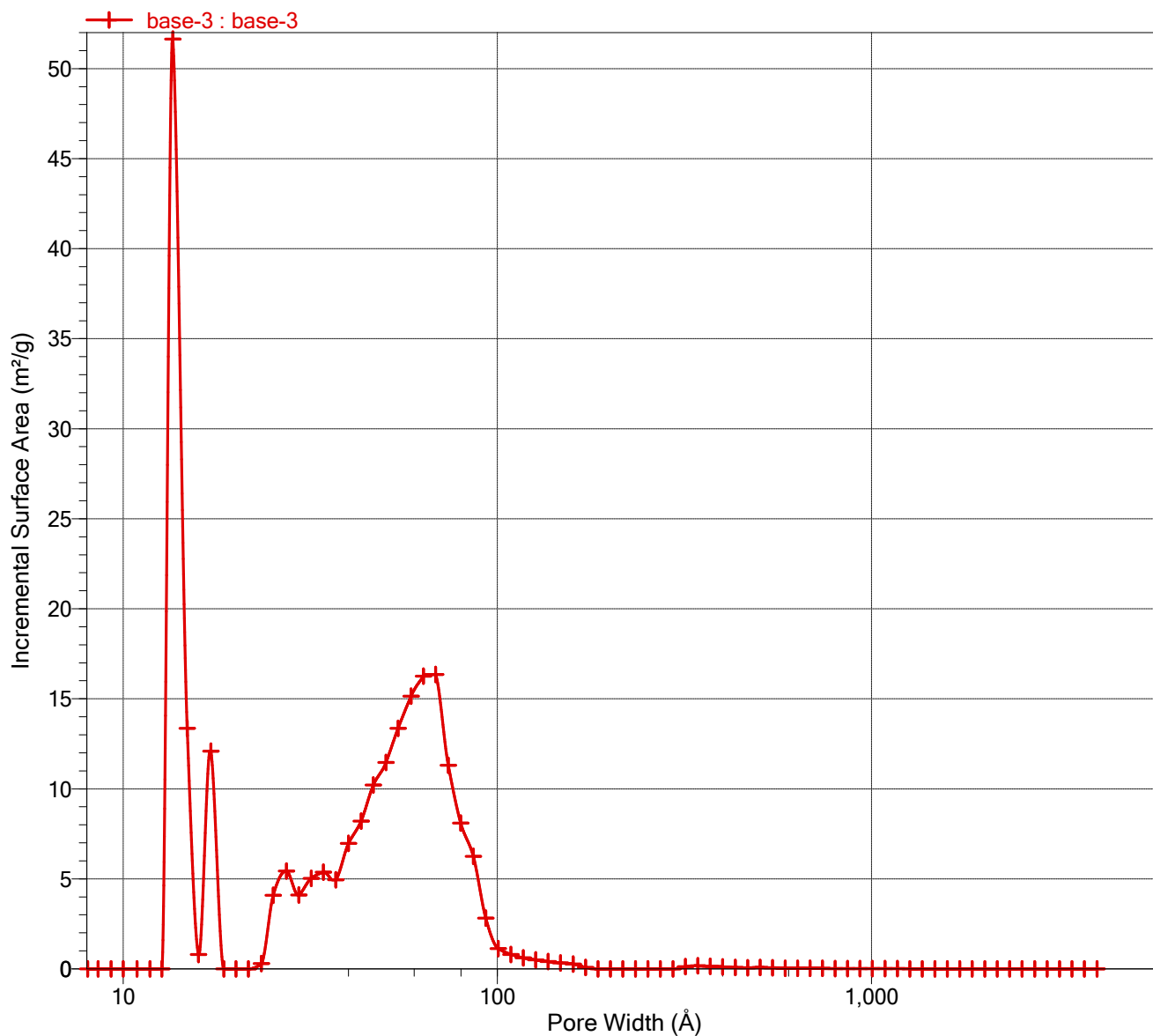
Thermal correction: No

Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

Incremental Surface Area vs. Pore Width



Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

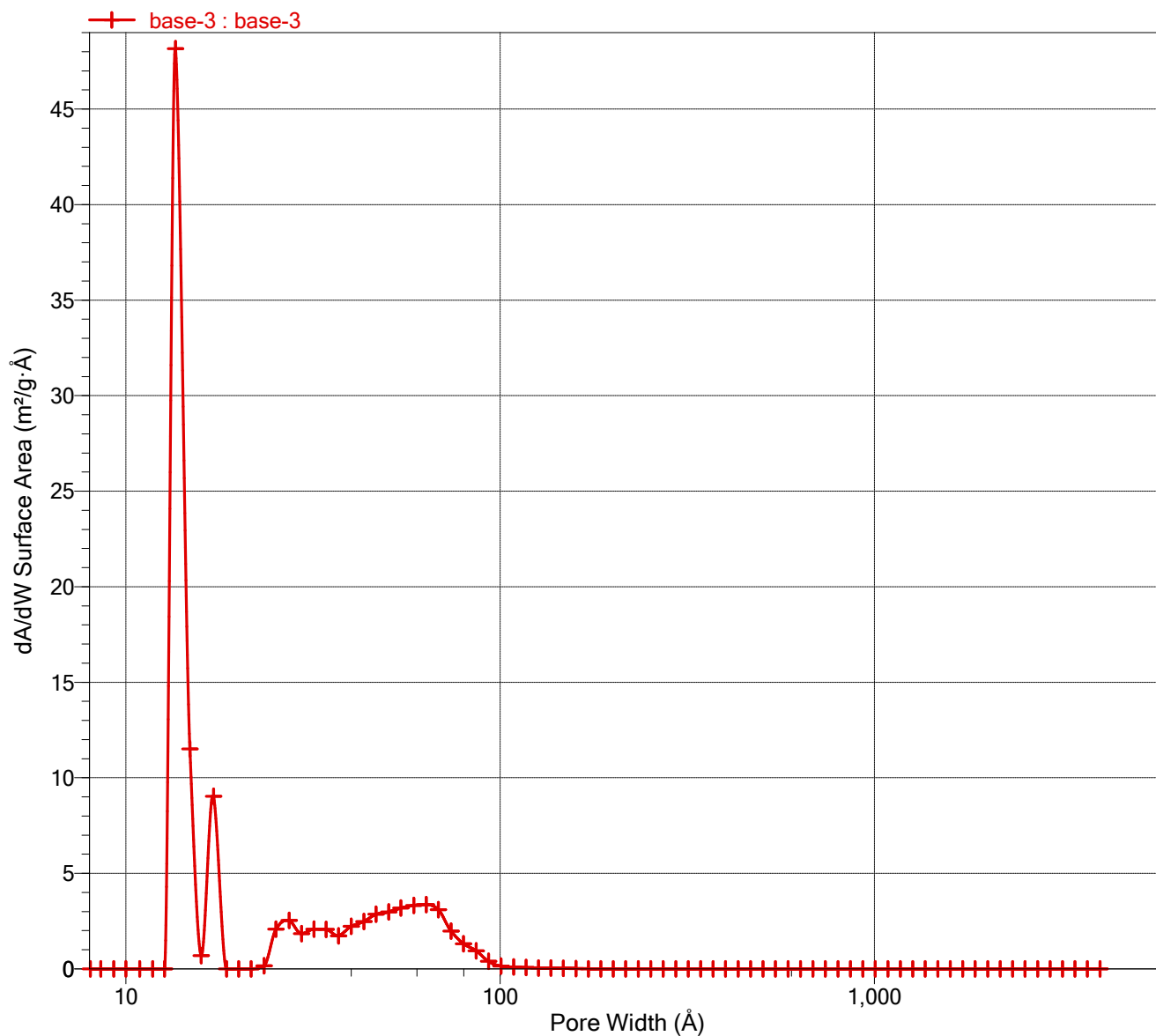
Thermal correction: No

Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

dA/dW Surface Area vs. Pore Width



Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

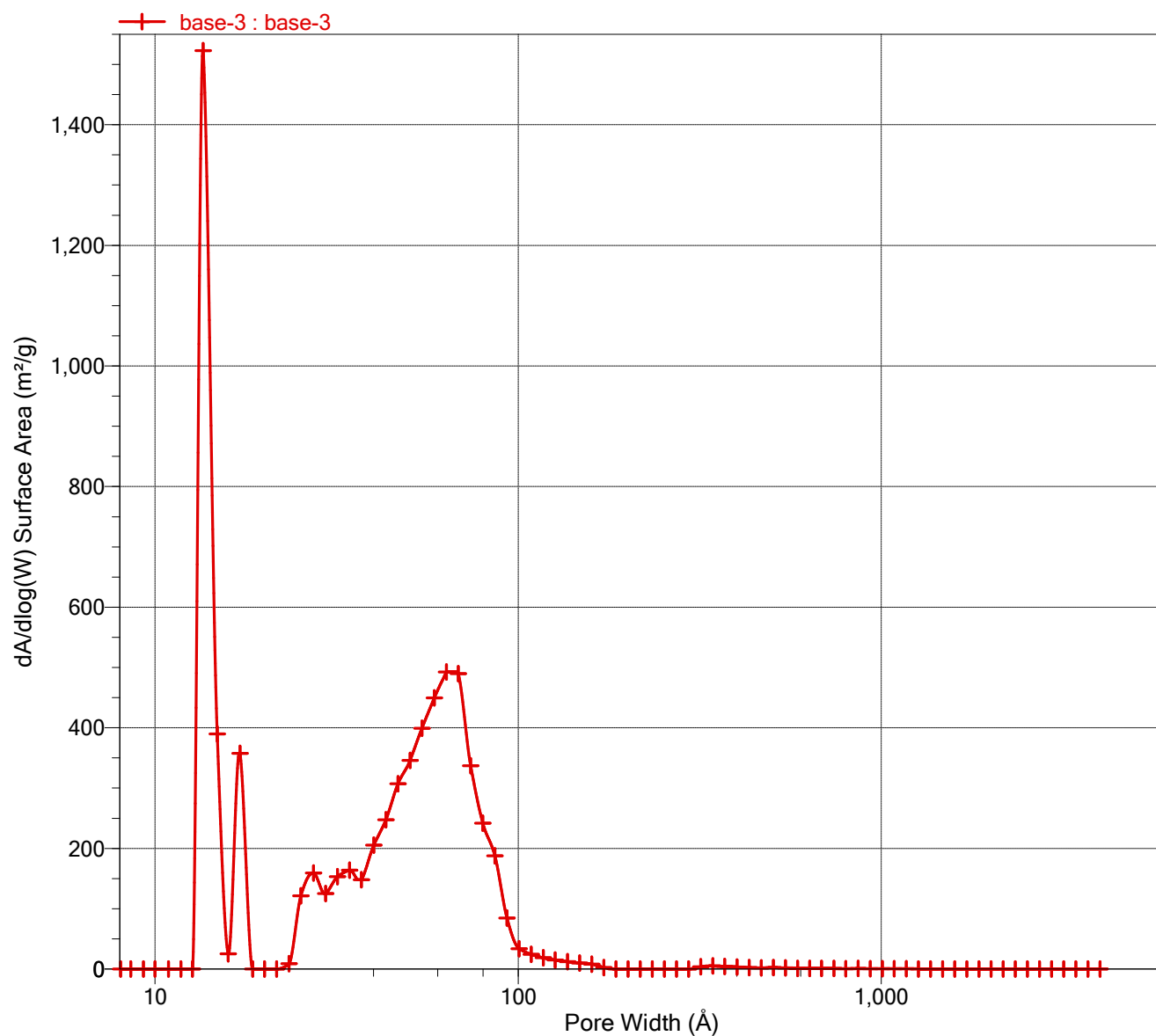
Thermal correction: No

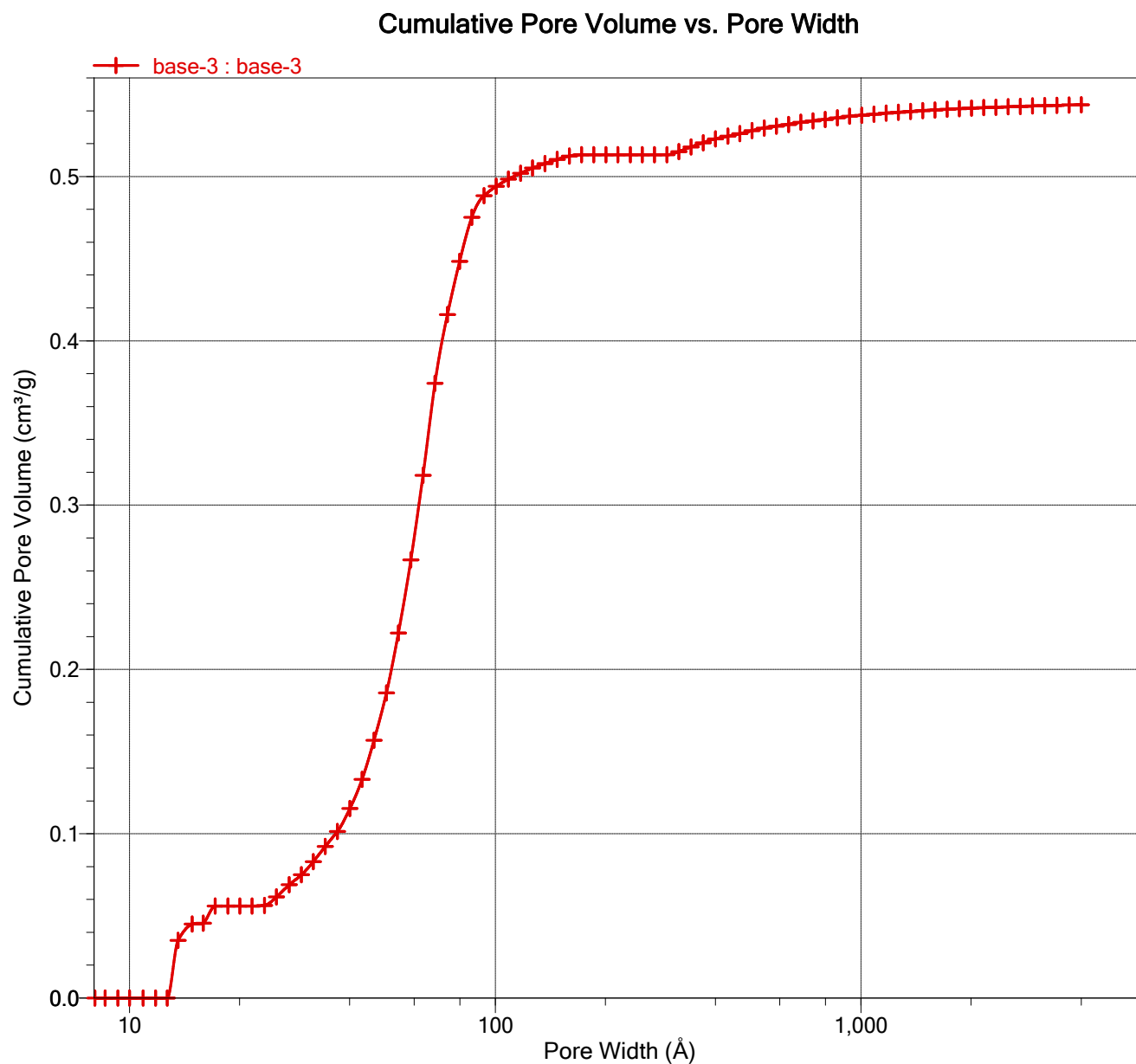
Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

dA/dlog(W) Surface Area vs. Pore Width





Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

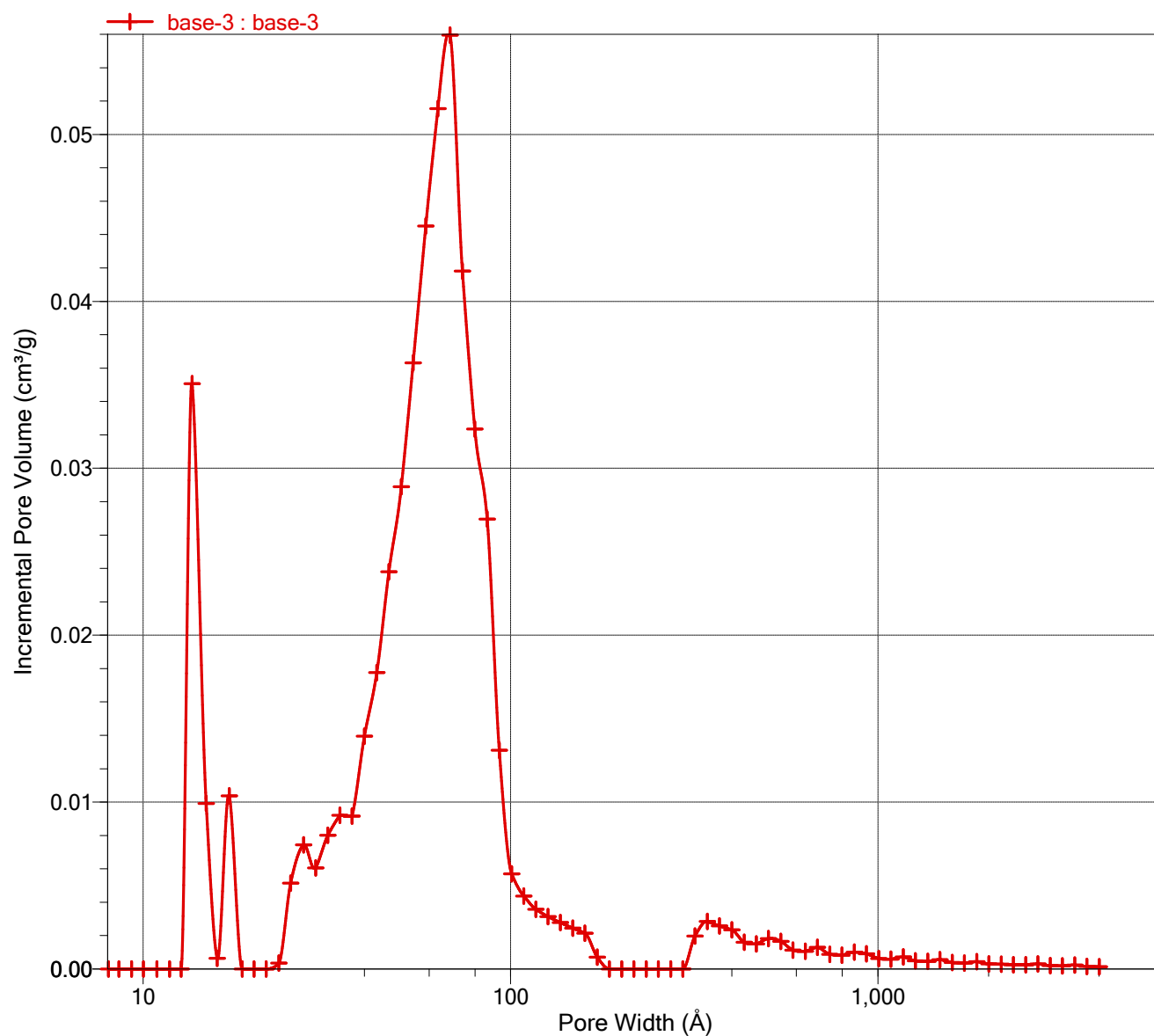
Thermal correction: No

Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

Incremental Pore Volume vs. Pore Width



Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

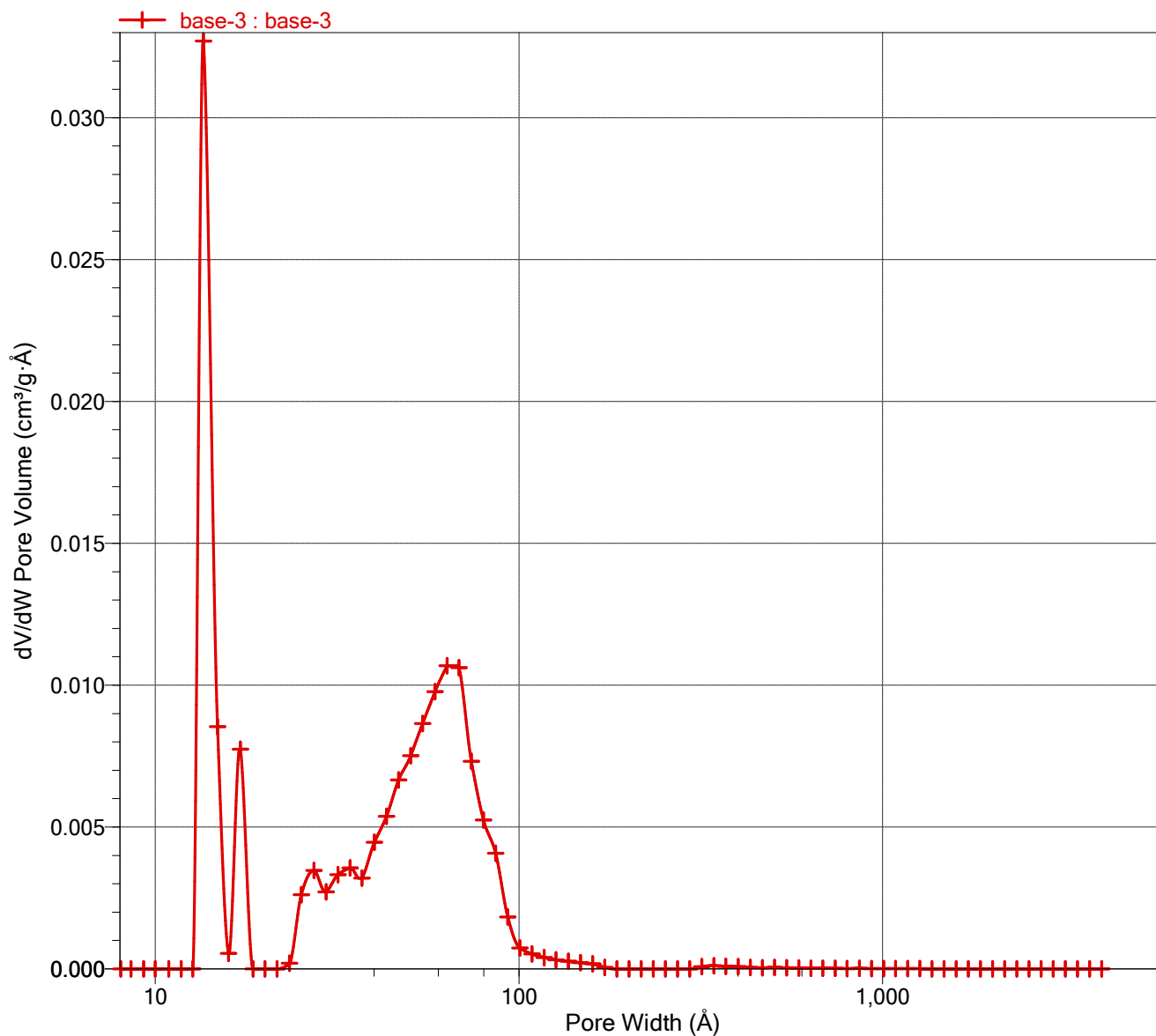
Thermal correction: No

Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

dV/dW Pore Volume vs. Pore Width



Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪骋课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

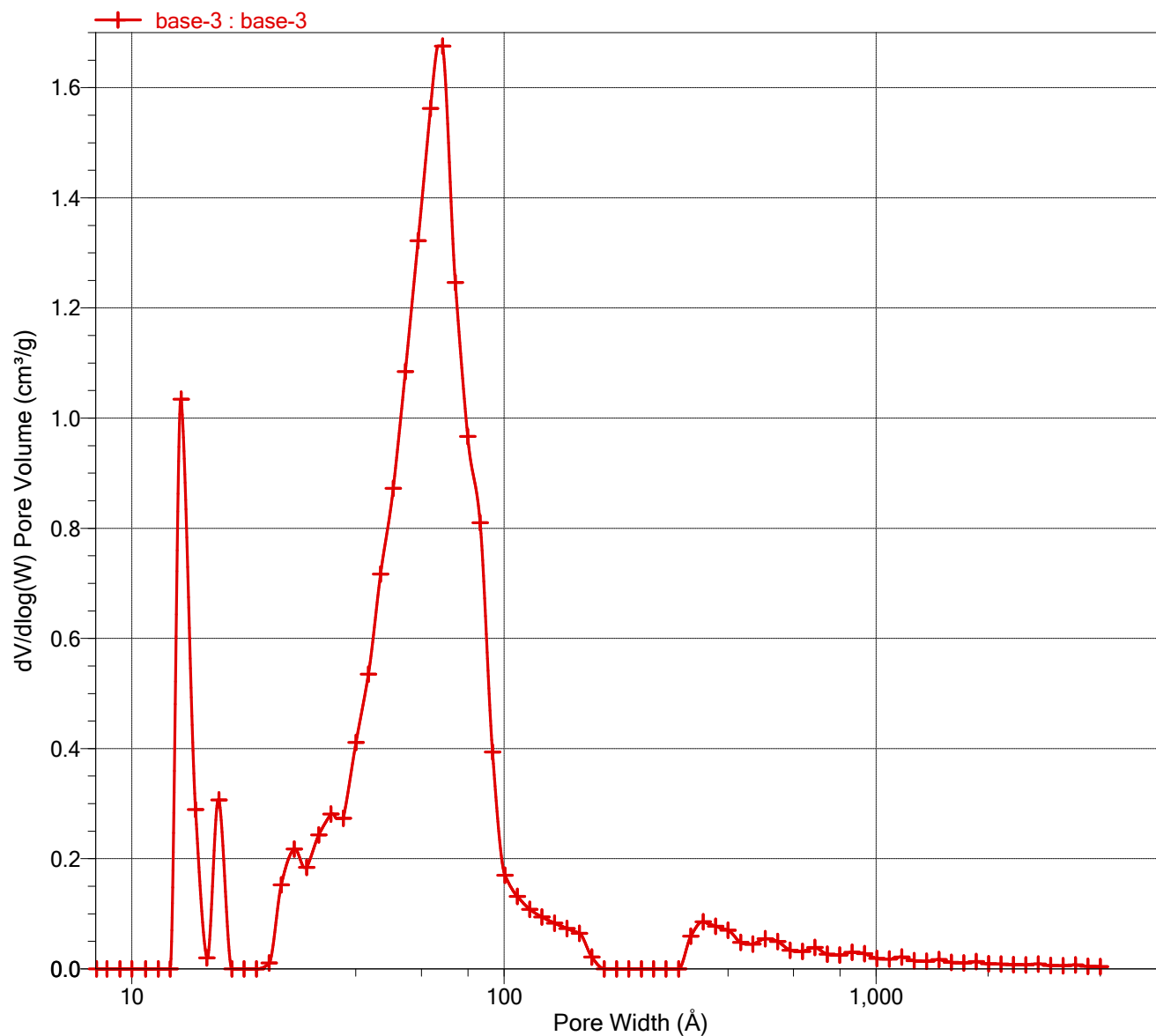
Thermal correction: No

Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

dV/dlog(W) Pore Volume vs. Pore Width



Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27

Completed: 2023/9/23 12:31:47

Report time: 2023/9/23 15:36:08

Sample mass: 0.1290 g

Analysis free space: 85.5725 cm³

Low pressure dose: 12.0000 cm³/g STP

Automatic degas: No

Analysis adsorptive: N₂

Analysis bath temp.: -195.850 °C

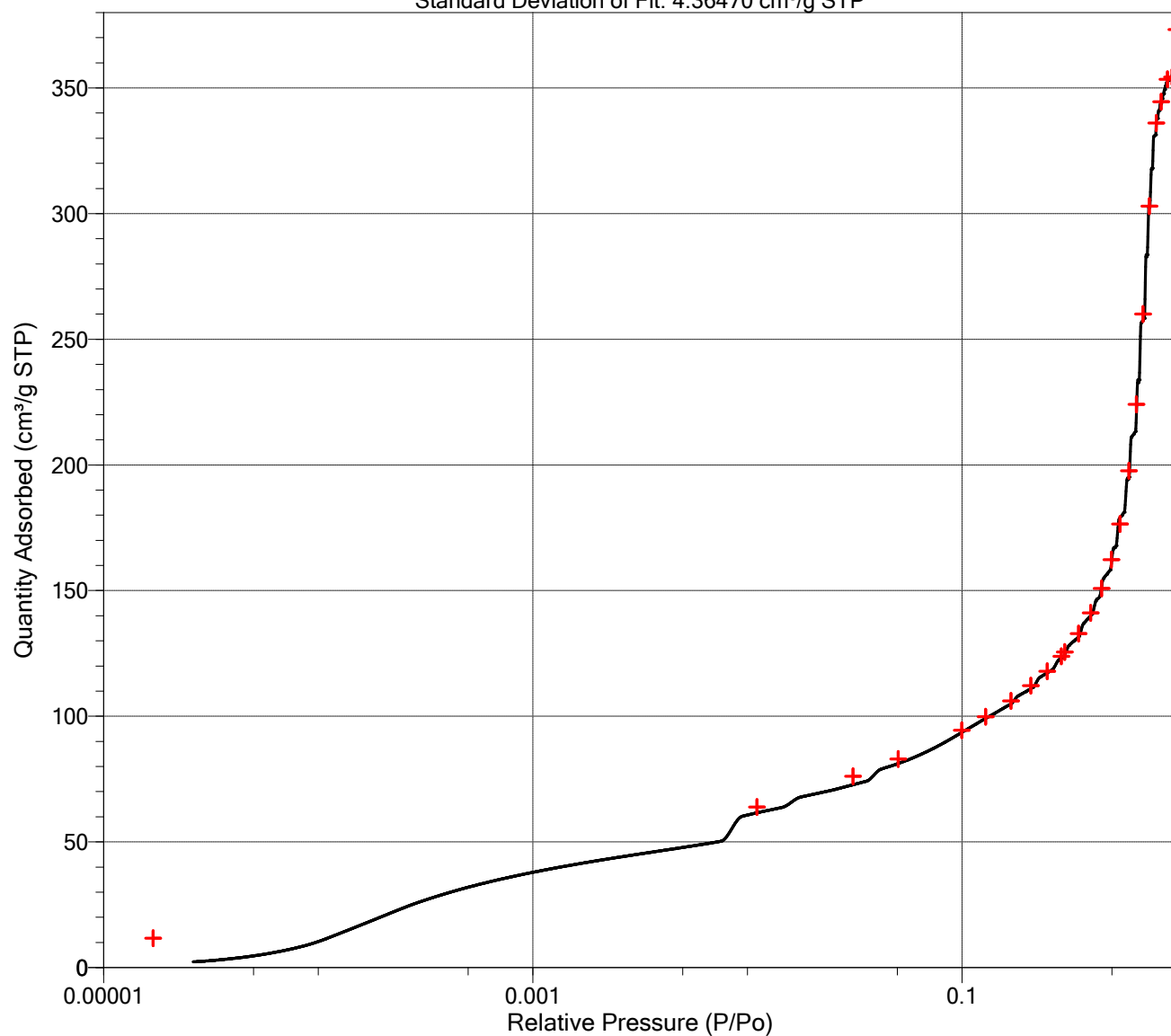
Thermal correction: No

Ambient free space: 28.2109 cm³ Measured

Equilibration interval: 20 s

Sample density: 1.000 g/cm³

Goodness of Fit

Standard Deviation of Fit: 4.36470 cm³/g STP


Sample: base-3

Operator:

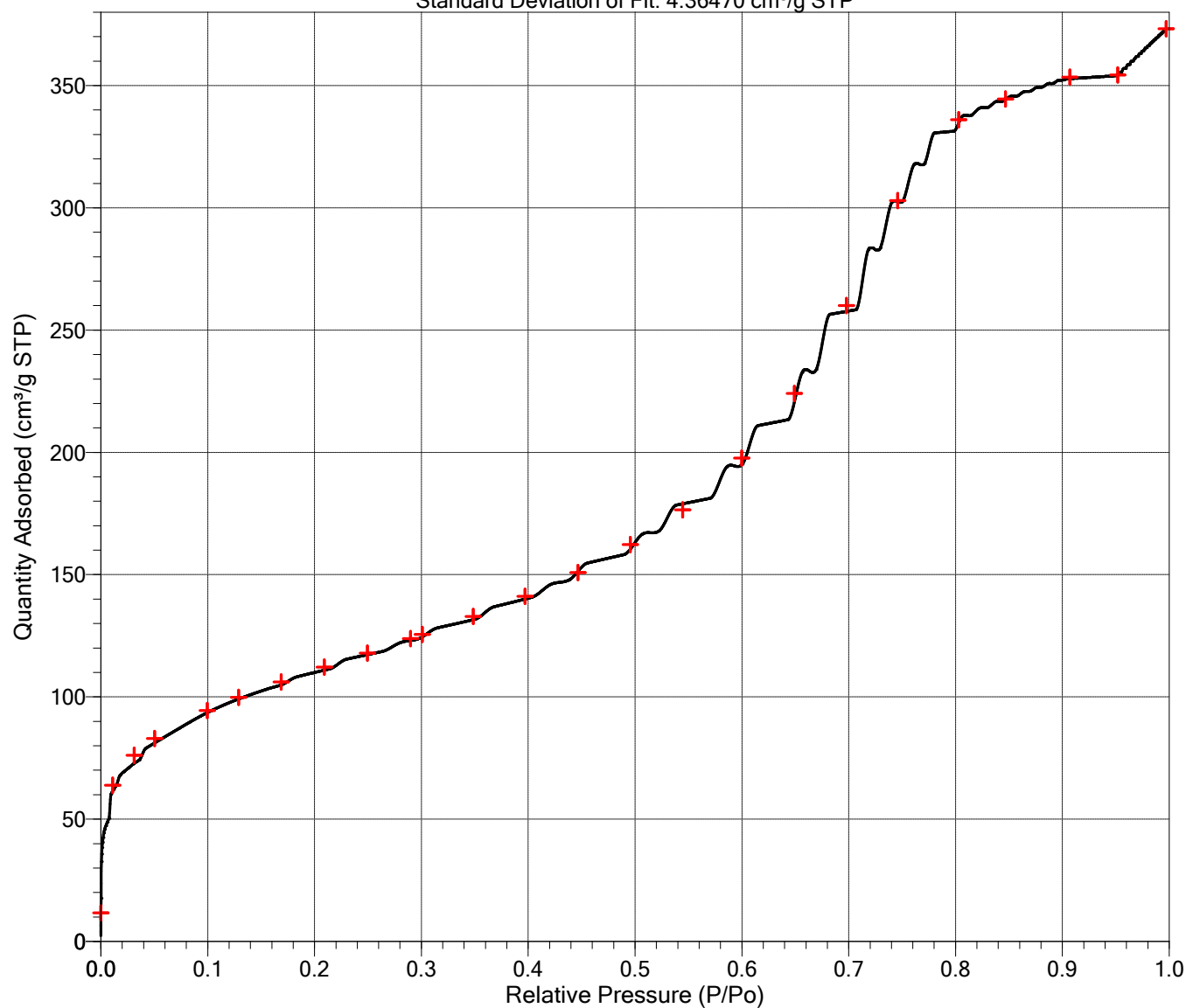
Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
Completed: 2023/9/23 12:31:47
Report time: 2023/9/23 15:36:08
Sample mass: 0.1290 g
Analysis free space: 85.5725 cm³
Low pressure dose: 12.0000 cm³/g STP
Automatic degas: No

Analysis adsorptive: N₂
Analysis bath temp.: -195.850 °C
Thermal correction: No
Ambient free space: 28.2109 cm³ Measured
Equilibration interval: 20 s
Sample density: 1.000 g/cm³

Goodness of Fit

Standard Deviation of Fit: 4.36470 cm³/g STP

Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27	Analysis adsorptive: N2
Completed: 2023/9/23 12:31:47	Analysis bath temp.: -195.850 °C
Report time: 2023/9/23 15:36:08	Thermal correction: No
Sample mass: 0.1290 g	Ambient free space: 28.2109 cm ³ Measured
Analysis free space: 85.5725 cm ³	Equilibration interval: 20 s
Low pressure dose: 12.0000 cm ³ /g STP	Sample density: 1.000 g/cm ³
Automatic degas: No	

DFT Surface Energy Reports

Primary Data
4070- Unable to load deconvolution model Invalid.

Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27	Analysis adsorptive: N2
Completed: 2023/9/23 12:31:47	Analysis bath temp.: -195.850 °C
Report time: 2023/9/23 15:36:08	Thermal correction: No
Sample mass: 0.1290 g	Ambient free space: 28.2109 cm ³ Measured
Analysis free space: 85.5725 cm ³	Equilibration interval: 20 s
Low pressure dose: 12.0000 cm ³ /g STP	Sample density: 1.000 g/cm ³
Automatic degas: No	

Dubinin Reports

Primary Data

4035- Cannot calculate optimized Astakhov exponent:
4031- Not enough points with a relative pressure in the range [0.0001, 0.05]
4026- Cannot calculate Dubinin-Astakhov: bad least squares data.

Sample: base-3

Operator:

Submitter:

File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
 Completed: 2023/9/23 12:31:47
 Report time: 2023/9/23 15:36:08
 Sample mass: 0.1290 g
 Analysis free space: 85.5725 cm³
 Low pressure dose: 12.0000 cm³/g STP
 Automatic degas: No

Analysis adsorptive: N2
 Analysis bath temp.: -195.850 °C
 Thermal correction: No
 Ambient free space: 28.2109 cm³ Measured
 Equilibration interval: 20 s
 Sample density: 1.000 g/cm³

MP Tabular Report

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

Total Pore Surface Area: 503.2982 m²/g
 Density Conversion Factor: 0.0015468

Pore Hydraulic Radius Interval (Å)	Average Pore Hydraulic Radius (Å)	Incremental Pore Volume (cm ³ /g)	Cumulative Pore Volume (cm ³ /g)	Differential Pore Volume (cm ³ /g· Å)	Incremental Pore Area (m ² /g)
0.000 - 9.311	4.6557	0.0000	0.0000	0.0000	0.0000
9.311 - 9.400	9.3557	-0.1259	-0.1259	-1.4206	-134.6216
9.400 - 9.600	9.5000	0.0228	-0.1031	0.1142	24.0380
9.600 - 9.800	9.7000	0.0524	-0.0507	0.2619	54.0051
9.800 - 10.000	9.9000	0.0786	0.0279	0.3931	79.4159
10.000 - 10.200	10.1000	0.1059	0.1338	0.5294	104.8266
10.200 - 10.400	10.3000	0.1341	0.2679	0.6707	130.2373
10.400 - 10.600	10.5000	0.0884	0.3563	0.4421	84.2045
10.600 - 10.800	10.7000	0.0181	0.3744	0.0905	16.9132
10.800 - 11.000	10.9000	0.0195	0.3939	0.0974	17.8654
11.000 - 11.200	11.1000	0.0209	0.4148	0.1046	18.8402
11.200 - 11.400	11.3000	0.0224	0.4372	0.1120	19.8151
11.400 - 11.600	11.5000	0.0185	0.4558	0.0927	16.1297
11.600 - 11.800	11.7000	-0.0004	0.4554	-0.0020	-0.3358
11.800 - 12.000	11.9000	-0.0013	0.4541	-0.0064	-1.0838
12.000 - 12.200	12.1000	-0.0002	0.4538	-0.0011	-0.1821
12.200 - 12.400	12.3000	0.0009	0.4547	0.0044	0.7196
12.400 - 12.600	12.5000	0.0020	0.4568	0.0101	1.6213
12.600 - 12.800	12.7000	0.0032	0.4600	0.0160	2.5230
12.800 - 13.000	12.9000	0.0044	0.4644	0.0221	3.4247
13.000 - 13.200	13.1000	0.0057	0.4701	0.0283	4.3264
13.200 - 13.400	13.3000	0.0070	0.4770	0.0348	5.2281
13.400 - 13.600	13.5000	0.0078	0.4848	0.0389	5.7633
13.600 - 13.800	13.7000	0.0020	0.4868	0.0101	1.4776
13.800 - 14.000	13.9000	0.0000	0.4868	0.0000	0.0000
14.000 - 14.200	14.1000	0.0000	0.4868	0.0000	0.0000
14.200 - 14.400	14.3000	0.0000	0.4868	0.0000	0.0000
14.400 - 14.600	14.5000	0.0000	0.4868	0.0000	0.0000
14.600 - 14.800	14.7000	0.0000	0.4868	0.0000	0.0000
14.800 - 15.000	14.9000	0.0000	0.4868	0.0000	0.0000
15.000 - 15.200	15.1000	0.0000	0.4868	0.0000	0.0000
15.200 - 15.400	15.3000	0.0000	0.4868	0.0000	0.0000
15.400 - 15.600	15.5000	0.0000	0.4868	0.0000	0.0000
15.600 - 15.800	15.7000	0.0000	0.4868	0.0000	0.0000
15.800 - 16.000	15.9000	0.0000	0.4868	0.0000	0.0000
16.000 - 16.200	16.1000	0.0000	0.4868	0.0000	0.0000
16.200 - 16.400	16.3000	-0.0000	0.4868	-0.0000	-0.0000
16.400 - 16.600	16.5000	0.0000	0.4868	0.0000	0.0000
16.600 - 16.800	16.7000	0.0000	0.4868	0.0000	0.0000
16.800 - 17.000	16.9000	0.0000	0.4868	0.0000	0.0000
17.000 - 17.200	17.1000	0.0000	0.4868	0.0000	0.0000
17.200 - 17.400	17.3000	0.0000	0.4868	0.0000	0.0000

Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
Completed: 2023/9/23 12:31:47
Report time: 2023/9/23 15:36:08
Sample mass: 0.1290 g
Analysis free space: 85.5725 cm³
Low pressure dose: 12.0000 cm³/g STP
Automatic degas: No

Analysis adsorptive: N2
Analysis bath temp.: -195.850 °C
Thermal correction: No
Ambient free space: 28.2109 cm³ Measured
Equilibration interval: 20 s
Sample density: 1.000 g/cm³

Pore Hydraulic Radius Interval (Å)	Average Pore Hydraulic Radius (Å)	Incremental Pore Volume (cm ³ /g)	Cumulative Pore Volume (cm ³ /g)	Differential Pore Volume (cm ³ /g· Å)	Incremental Pore Area (m ² /g)
17.400 - 17.600	17.5000	0.0000	0.4868	0.0000	0.0000
17.600 - 17.800	17.7000	0.0000	0.4868	0.0000	0.0000
17.800 - 18.000	17.9000	0.0000	0.4868	0.0000	0.0000
18.000 - 18.200	18.1000	0.0000	0.4868	0.0000	0.0000
18.200 - 18.400	18.3000	0.0000	0.4868	0.0000	0.0000
18.400 - 18.600	18.5000	0.0000	0.4868	0.0000	0.0000
18.600 - 18.800	18.7000	0.0000	0.4868	0.0000	0.0000
18.800 - 19.000	18.9000	0.0000	0.4868	0.0000	0.0000
19.000 - 19.200	19.1000	0.0000	0.4868	0.0000	0.0000
19.200 - 19.400	19.3000	0.0000	0.4868	0.0000	0.0000
19.400 - 19.600	19.5000	0.0000	0.4868	0.0000	0.0000
19.600 - 19.800	19.7000	0.0000	0.4868	0.0000	0.0000

Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27	Analysis adsorptive: N2
Completed: 2023/9/23 12:31:47	Analysis bath temp.: -195.850 °C
Report time: 2023/9/23 15:36:08	Thermal correction: No
Sample mass: 0.1290 g	Ambient free space: 28.2109 cm ³ Measured
Analysis free space: 85.5725 cm ³	Equilibration interval: 20 s
Low pressure dose: 12.0000 cm ³ /g STP	Sample density: 1.000 g/cm ³
Automatic degas: No	

Sample Information

Method: Default
Sample: base-3
Operator:
Submitter:
Mass type: Entered
Sample mass: 0.1290 g
Density: 1.000 g/cm³
Type of data: Automatically collected
Instrument type: 2460
Original instrument type: 2460
Comments:

Sample Tube

Sample tube: Sample Tube
Ambient free space: 1.0000 cm³
Analysis free space: 1.0000 cm³
Non-ideality factor: 0.0000620
Use isothermal jacket: Yes
Use filler rod: No
Vacuum seal type: None

Degas Conditions

Degas conditions: Degas Conditions

Smart VacPrep evacuation

Backfill sample tube: Automatic
Evacuation rate: 5.0 mmHg/s
Unrest. evacuation from: 5.0 mmHg
Vacuum level: 1.000000e-02 mmHg
Evacuation time: 10 min
Temperature ramp rate: 10.0 °C/min
Target temperature: 30 °C
Hold pressure: 100 mmHg

Heating Phase

Sample prep: Stage	Temperature (° C)	Ramp Rate (° C/min)	Time (min)
1	30	10.0	10

Analysis Conditions

Analysis conditions: Run Conditions
Isotherm collection: Target Pressure
Absolute pressure dosing: No

Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27
Completed: 2023/9/23 12:31:47
Report time: 2023/9/23 15:36:08
Sample mass: 0.1290 g
Analysis free space: 85.5725 cm³
Low pressure dose: 12.0000 cm³/g STP
Automatic degas: No

Analysis adsorptive: N2
Analysis bath temp.: -195.850 °C
Thermal correction: No
Ambient free space: 28.2109 cm³ Measured
Equilibration interval: 20 s
Sample density: 1.000 g/cm³

Pressure Table

Starting Pressure (P/Po)	Pressure Increment (P/Po)	Ending Pressure (P/Po)
0.010000000	0.020000000	0.050000000
0.050000000	0.040000000	0.300000000
0.300000000	0.050000000	0.995000000
0.995000000	0.050000000	0.010000000

Preparation

Fast evacuation: No
Evacuation rate: 5.0 mmHg/s
Unrestricted evacuation from: 5.0 mmHg
Vacuum setpoint: 10 µmHg
Evacuation time: 0.10 h

Leak test: No
Use TranSeal: No

Free Space

Measured before analysis
Lower Dewar for evacuation: Yes
Evacuation time: 0.10 h
Outgas test: No

Po and Temperature

Po type: Measured in Psat tube for each point
Temperature type: Entered
Temperature: -195.850 °C

Dosing

Use first pressure fixed dose: No
Use maximum volume increment: No
Target tolerance: 5.0% or 5.000 mmHg
Low pressure dosing: Yes
Dose amount: 12.0000 cm³/g STP
Minimum equilibration delay: 0.00 h
Maximum equilibration delay: 3.00 h
Maximum number of decants: 6

Equilibration

	Relative Pressure (P/Po)	Equilibration Interval (s)
1	0.010000000	20
2	1.000000000	10

Minimum equilibration delay at P/Po >= 0.995: 600 s

Sample Backfill

Backfill at start of analysis: Yes
Backfill at end of analysis: Yes

Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27	Analysis adsorptive: N2
Completed: 2023/9/23 12:31:47	Analysis bath temp.: -195.850 °C
Report time: 2023/9/23 15:36:08	Thermal correction: No
Sample mass: 0.1290 g	Ambient free space: 28.2109 cm ³ Measured
Analysis free space: 85.5725 cm ³	Equilibration interval: 20 s
Low pressure dose: 12.0000 cm ³ /g STP	Sample density: 1.000 g/cm ³
Automatic degas: No	

Sample Backfill

Backfill gas: N2

Adsorptive Properties

Adsorptive: Nitrogen @ 77.35 K (N2)
Non-condensing adsorptive: No
Maximum manifold pressure: 925.00 mmHg
Therm. tran. hard-sphere diameter: 3.8600 Å
Molecular cross-sectional area: 0.162 nm²
Adsorbate molecular weight: 28.01
Thermal conductivity: 1.00
Non-ideality factor: 0.0000620
Density conversion factor: 0.0015468
Dosing method: Normal

Psat vs. Temperature Table

	Saturation Pressure (mmHg)	Temperature (° C)
1	600.193	-197.75
2	634.512	-197.30
3	674.383	-196.80
4	720.420	-196.25
5	742.119	-196.00
6	759.833	-195.80
7	777.867	-195.60
8	805.525	-195.30
9	853.268	-194.80
10	903.122	-194.30

Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27	Analysis adsorptive: N2
Completed: 2023/9/23 12:31:47	Analysis bath temp.: -195.850 °C
Report time: 2023/9/23 15:36:08	Thermal correction: No
Sample mass: 0.1290 g	Ambient free space: 28.2109 cm ³ Measured
Analysis free space: 85.5725 cm ³	Equilibration interval: 20 s
Low pressure dose: 12.0000 cm ³ /g STP	Sample density: 1.000 g/cm ³
Automatic degas: No	

Sample Log

Date	Time	Log Message
2023/9/22	22:39:27	Starting a sample analysis for F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP on port 3.
2023/9/22	23:30:32	Measured warm freespace: 28.2109 cm ³ (P1: 800.79 mmHg, P2: 567.14 mmHg, Tman: 301.6 K).
2023/9/22	23:41:00	Measured cold freespace: 85.5725 cm ³ (P3: 186.97 mmHg).
2023/9/23	0:23:31	Low pressure data collection started
2023/9/23	2:04:43	6521- Time limit exceeded while dosing manifold to 9.0000 mmHg with N2
2023/9/23	3:34:14	Standard data collection started.
2023/9/23	12:17:45	Termination started.
2023/9/23	12:31:47	Finished a sample analysis for F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP on port 3.

Sample: base-3
Operator:
Submitter:
File: F:\DATA\汪聘课题组\FXL\20230922\base-3.SMP

Started: 2023/9/22 22:39:27	Analysis adsorptive: N2
Completed: 2023/9/23 12:31:47	Analysis bath temp.: -195.850 °C
Report time: 2023/9/23 15:36:08	Thermal correction: No
Sample mass: 0.1290 g	Ambient free space: 28.2109 cm ³ Measured
Analysis free space: 85.5725 cm ³	Equilibration interval: 20 s
Low pressure dose: 12.0000 cm ³ /g STP	Sample density: 1.000 g/cm ³
Automatic degas: No	

Validation Report

Summary

Isotherm: Warning
BET: Passed

Isotherm Reports

Free Space: Passed

Po Passed

Pressure/Quantity adsorbed: Passed

Desorption Not within limits. Increase the sample mass, increase the equilibration interval, or check the free space.