



TriStar II 3020 V1.03 (V1.03)

Unit 4 Port 1

Serial #: 240

Page 1

Sample: CA 9 1  
Operator: TC/AT  
Submitter: Carolina Stalite Company  
File: C:\...\08AUG\10-3992.SMP

Started: 8/4/2010 12:01:19PM  
Completed: 8/4/2010 1:45:42PM  
Report Time: 8/4/2010 2:56:28PM  
Warm Free Space: 6.0654 cm<sup>3</sup> Measured  
Equilibration Interval: 10 s  
Sample Density: 1.000 g/cm<sup>3</sup>

Analysis Adsorptive: N2  
Analysis Bath Temp.: 77.350 K  
Sample Mass: 2.2115 g  
Cold Free Space: 16.0176 cm<sup>3</sup> Measured  
Low Pressure Dose: None  
Automatic Degas: Yes

Sample Prep: Stage  
1

Temperature (°C)  
130

Ramp Rate (°C/min)  
10

Time (min)  
960

### Summary Report

#### Surface Area

Single point surface area at  $P/P_0 = 0.252435085$ : 0.2651 m<sup>2</sup>/g

BET Surface Area: 0.2755 m<sup>2</sup>/g



TriStar II 3020 V1.03 (V1.03)

Unit 4 Port 1

Serial #: 240

Page 2

Sample: CA 9 1  
 Operator: TC/AT  
 Submitter: Carolina Stalite Company  
 File: C:\...\08AUG\10-3992.SMP

Started: 8/4/2010 12:01:19PM	Analysis Adsorptive: N2
Completed: 8/4/2010 1:45:42PM	Analysis Bath Temp.: 77.350 K
Report Time: 8/4/2010 2:56:28PM	Sample Mass: 2.2115 g
Warm Free Space: 6.0654 cm <sup>3</sup> Measured	Cold Free Space: 16.0176 cm <sup>3</sup> Measured
Equilibration Interval: 10 s	Low Pressure Dose: None
Sample Density: 1.000 g/cm <sup>3</sup>	Automatic Degas: Yes

Sample Prep: Stage	Temperature (°C)	Ramp Rate (°C/min)	Time (min)
1	130	10	960

**Isotherm Tabular Report**

Relative Pressure (P/Po)	Absolute Pressure (mmHg)	Quantity Adsorbed (cm <sup>3</sup> /g STP)	Elapsed Time (h:min)	Saturation Pressure (mmHg)
			01:17	739.228821
0.052104486	38.539268	0.0548	01:21	739.653564
0.074464080	55.080631	0.0591	01:24	739.693970
0.100647420	74.450378	0.0634	01:26	739.714722
0.126376433	93.493500	0.0669	01:28	739.801697
0.151841263	112.314148	0.0701	01:30	739.681335
0.177060636	130.974121	0.0731	01:32	739.713379
0.202280298	149.628159	0.0759	01:34	739.707031
0.227341784	168.171783	0.0788	01:36	739.731079
0.252435085	186.734863	0.0815	01:38	739.734192
0.277536971	205.281616	0.0840	01:41	739.655029
0.302544323	223.765762	0.0869	01:43	739.613159

Sample: CA 9 1  
 Operator: TC/AT  
 Submitter: Carolina Stalite Company  
 File: C:\...\08AUG\10-3992.SMP

Started: 8/4/2010 12:01:19PM  
 Completed: 8/4/2010 1:45:42PM  
 Report Time: 8/4/2010 2:56:28PM  
 Warm Free Space: 6.0654 cm<sup>3</sup> Measured  
 Equilibration Interval: 10 s  
 Sample Density: 1.000 g/cm<sup>3</sup>

Analysis Adsorptive: N2  
 Analysis Bath Temp.: 77.350 K  
 Sample Mass: 2.2115 g  
 Cold Free Space: 16.0176 cm<sup>3</sup> Measured  
 Low Pressure Dose: None  
 Automatic Degas: Yes

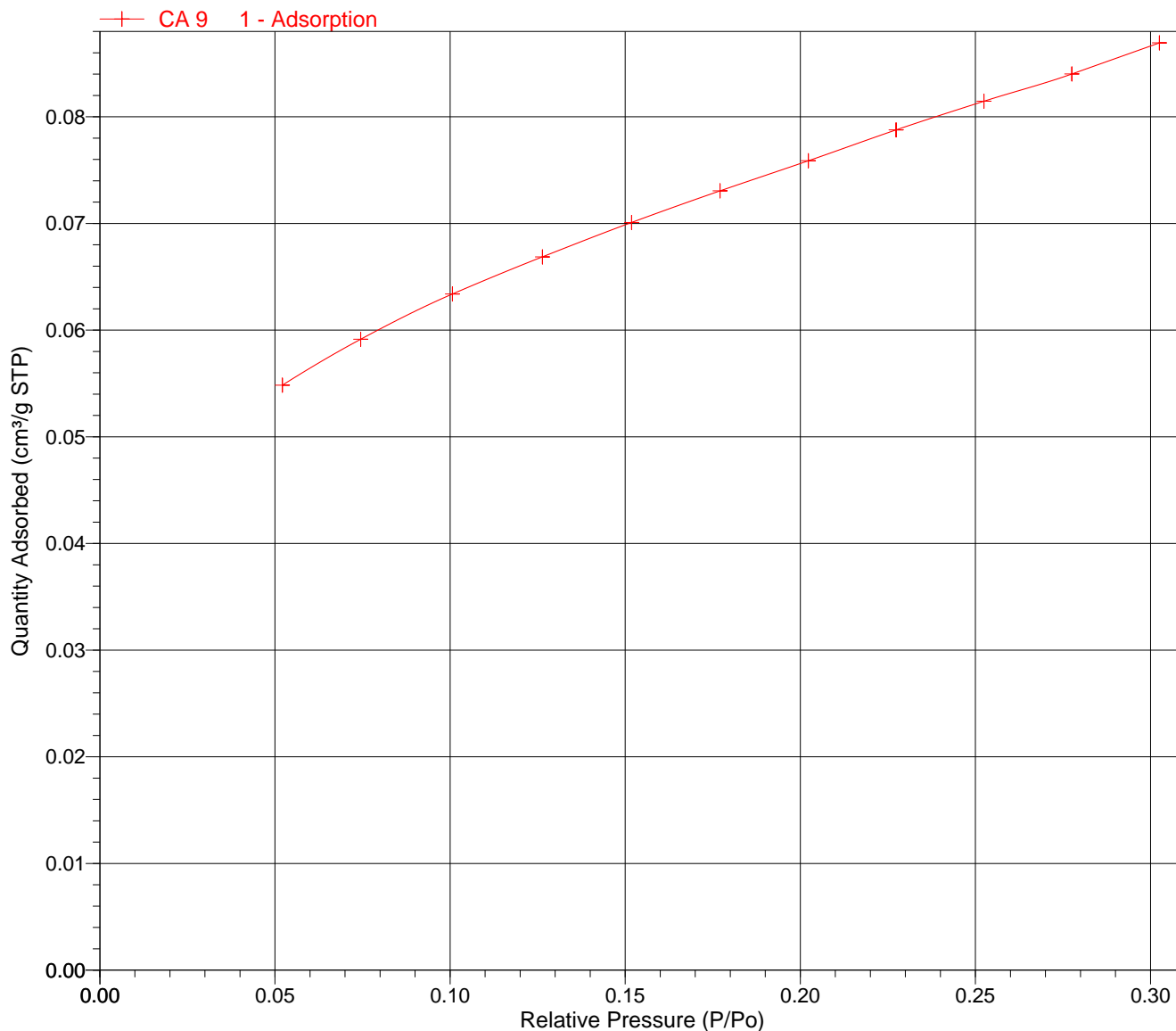
Sample Prep: Stage  
 1

Temperature (°C)  
 130

Ramp Rate (°C/min)  
 10

Time (min)  
 960

Isotherm Linear Plot



Sample: CA 9 1  
 Operator: TC/AT  
 Submitter: Carolina Stalite Company  
 File: C:\...\08AUG\10-3992.SMP

Started: 8/4/2010 12:01:19PM	Analysis Adsorptive: N2
Completed: 8/4/2010 1:45:42PM	Analysis Bath Temp.: 77.350 K
Report Time: 8/4/2010 2:56:28PM	Sample Mass: 2.2115 g
Warm Free Space: 6.0654 cm <sup>3</sup> Measured	Cold Free Space: 16.0176 cm <sup>3</sup> Measured
Equilibration Interval: 10 s	Low Pressure Dose: None
Sample Density: 1.000 g/cm <sup>3</sup>	Automatic Degas: Yes

Sample Prep: Stage	Temperature (°C)	Ramp Rate (°C/min)	Time (min)
1	130	10	960

**BET Surface Area Report**

BET Surface Area: 0.2755 ± 0.0007 m<sup>2</sup>/g  
 Slope: 15.609529 ± 0.041645 g/cm<sup>3</sup> STP  
 Y-Intercept: 0.190417 ± 0.006872 g/cm<sup>3</sup> STP  
 C: 82.975475  
 Qm: 0.0633 cm<sup>3</sup>/g STP  
 Correlation Coefficient: 0.9999751  
 Molecular Cross-Sectional Area: 0.1620 nm<sup>2</sup>

Relative Pressure (P/Po)	Quantity Adsorbed (cm <sup>3</sup> /g STP)	1/[Q(Po/P - 1)]
0.052104486	0.0548	1.002382
0.074464080	0.0591	1.360327
0.100647420	0.0634	1.765599
0.126376433	0.0669	2.163300
0.151841263	0.0701	2.554120
0.177060636	0.0731	2.945190
0.202280298	0.0759	3.341983
0.227341784	0.0788	3.735396
0.252435085	0.0815	4.145464

Sample: CA 9 1  
 Operator: TC/AT  
 Submitter: Carolina Stalite Company  
 File: C:\...\08AUG\10-3992.SMP

Started: 8/4/2010 12:01:19PM  
 Completed: 8/4/2010 1:45:42PM  
 Report Time: 8/4/2010 2:56:28PM  
 Warm Free Space: 6.0654 cm<sup>3</sup> Measured  
 Equilibration Interval: 10 s  
 Sample Density: 1.000 g/cm<sup>3</sup>

Analysis Adsorptive: N2  
 Analysis Bath Temp.: 77.350 K  
 Sample Mass: 2.2115 g  
 Cold Free Space: 16.0176 cm<sup>3</sup> Measured  
 Low Pressure Dose: None  
 Automatic Degas: Yes

Sample Prep: Stage  
 1

Temperature (°C)  
 130

Ramp Rate (°C/min)  
 10

Time (min)  
 960

### BET Surface Area Plot

