

# SPECIFICATIONS

## ChemiSorb 2750



### SAMPLE PARAMETERS

|                             |   |
|-----------------------------|---|
| Active Gas Volume           | Minimum: 0.001 cm <sup>3</sup><br>Maximum: Greater than 10 cm <sup>3</sup>  |
| Active Specific volume      | Minimum: 0.0001 cm <sup>3</sup> /g<br>Maximum: Greater than 20 cm <sup>3</sup> /g   |
| Surface Area                | Minimum: 0.2 m <sup>2</sup><br>Maximum: 199.9 m <sup>2</sup>  |
| Specific Surface Area       | Minimum: 0.02 m <sup>2</sup> /g<br>Maximum: Limited only by weighing of sufficiently small sample   |
| Pore Volume                 | Minimum: 0.0001 cm <sup>3</sup><br>Maximum: 0.15 cm <sup>3</sup>  |
| Sample Size                 | Up to 1 cm <sup>3</sup> diameter x 3 cm <sup>3</sup> length   |
| Sample Ports                | Two sample preparation/analysis ports   |
| Throughput                  | Active Volume: Depends on injection steps; typically 1 to 2 hours per sample<br>Surface Area: Typically 12 minutes per sample<br>Total Pore Volume: Typically 45 minutes per sample |
| Preparation Temperature     | 35 to 400 °C with heating mantle  |
| Gas Injection Loop Capacity | 100µL, 500µL, 1000µL supplied as standard set with instrument; other sizes available  |

### ACCURACY/ REPRODUCIBILITY

|               |  |
|---------------|--|
| Active Volume | Low and Moderately Low: Typically better than ± 2% with ± 0.5% reproducibility<br>High: Typically better than ± 1.5% with ± 0.5% reproducibility |
| Surface Area  | Low and Moderately Low: Typically better than ± 3% with ± 0.5% reproducibility<br>High: Typically better than ± 2% with ± 0.5% reproducibility   |

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### SUPPLIES

|                |  |
|----------------|--|
| <b>Gas</b>     | Ammonia, carbon monoxide, hydrogen, nitrous oxide, and oxygen. Mixtures, with helium, of nitrogen, argon, krypton, ethane, n-butane, and other non-corrosive gases. A mixture of 30% N <sub>2</sub> and 70% He is recommended for single-point analyses. Mixtures of He and approximately 5, 12, 18, and 24% N <sub>2</sub> are suggested for multi-point use. |
| <b>Coolant</b> | Liquid nitrogen or argon, solvent slush baths, ice water as appropriate for adsorbate  |

### EXPOSED MATERIALS

|                          |  |
|--------------------------|--|
| <b>Sample Tube</b>       | Quartz (Chemisorption); Borosilicate (Physisorption)   |
| <b>Exposed Materials</b> | Stainless steel, borosilicate glass, Buna-N, rhenium passivated tungsten filament, PEEK, teflon, nickel, silicone (septum). Brass and copper for the inert gas paths |

### ENVIRONMENT

|                    |   |
|--------------------|---|
| <b>Temperature</b> | 15 to 35 °C (59 to 95 °F) operating;<br>0 to 50 °C (32 to 122 °F) storing or shipping |
| <b>Humidity</b>    | 20 to 80% relative, non-condensing  |

### ELECTRICAL

|                  |  |
|------------------|--|
| <b>Voltage</b>   | 100, 120, 220 or 240 VAC ± 10%               |
| <b>Frequency</b> | 50/60 Hz                                     |
| <b>Power</b>     | 1.25 A (100/120 VAC)<br>0.75 A (220/240 VAC) |

### PHYSICAL

|               |                    |
|---------------|--------------------|
| <b>Height</b> | 53 cm (20.9 in.)   |
| <b>Width</b>  | 46.5 cm (18.3 in.) |
| <b>Depth</b>  | 30.5 cm (12 in.)   |
| <b>Weight</b> | 22 kg (48 lbs)     |

*\*Due to continuous improvements, specifications are subject to change without notice.*