

1. Select Measurement Techniques

- Mercury Porosimetry: Suitable for larger pore sizes and bulk materials.
- Gas Adsorption (BET Analysis): Ideal for specific surface area and microporosity.
- Scanning Electron Microscopy (SEM): Provides detailed visualization of pore structures.
- Other: _____

2. Prepare the Sample

- Ensure samples are clean and free of contaminants.
- Adjust sample size and geometry for the selected measurement technique.
- Store samples in a controlled environment before testing (e.g., desiccator for dry samples).
- Record sample details (e.g., source, weight, dimensions).

3. Calibrate Equipment

- Verify instrument calibration before testing.
- Use appropriate calibration standards for the selected technique.
- Document calibration results and confirm equipment performance.

4. Conduct the Test

- Set up equipment according to the chosen technique.



- Input sample data and test parameters (e.g., pressure range for mercury porosimetry).
- Monitor the test to ensure stable and accurate readings.
- Save raw data and observations during the test.

5. Analyze Results

- Review raw data and ensure consistency.
- Calculate key metrics:
 - Pore size distribution.
 - Specific surface area.
 - Porosity percentage.
- Cross-check results with material specifications or desired outcomes.
- Identify any anomalies or unexpected results for further investigation.

6. Report Findings

- Compile data into a clear and concise report.
- Include graphs or images (e.g., pore distribution curves, SEM images).
- Highlight critical findings and deviations from expected values.
- Provide actionable recommendations based on the results.

7. Maintain Equipment

- Clean and store equipment according to manufacturer guidelines.



Porosity Testing Checklist

- Replace consumables or damaged parts as needed.
- Schedule routine maintenance to ensure long-term accuracy.
- Record maintenance actions in the equipment log.

