

# Cathodes

Advanced SOFC Powders & Pastes



[fuelcellmaterials.com](http://fuelcellmaterials.com)  
PERFORMANCE AND QUALITY DELIVERED

**Batch Reproducibility**  
**Tailored Performance**  
**Tonnage Quantities**

**fuelcellmaterials** offers multiple powders with excellent oxygen ion conductivity for your SOFC cathode needs. These include LSM, an industry proven standard, as well as LSCF and LSC, which can be used for lower temperature applications. Composite powders such as LSCF/GDC and LSM/YSZ are also available for use in multilayer cathodes. These composite materials extend the triple phase boundary length in order to increase electrochemical performance.

**fuelcellmaterials'** cathode powders are produced in a ISO 9001:2008 certified facility with tight controls on critical features such as stoichiometry, surface area and particle size distribution.

Expanded powder production capabilities allows for the production of high quality materials at economical prices throughout each step of your R&D process and on to development. **fuelcellmaterials** has facilitated customer growth from the early stages of design & development to pilot scale, and ultimately to megawatt volumes for full scale production. By using scalable processing equipment we assure similar powder characteristics at each stage of development.

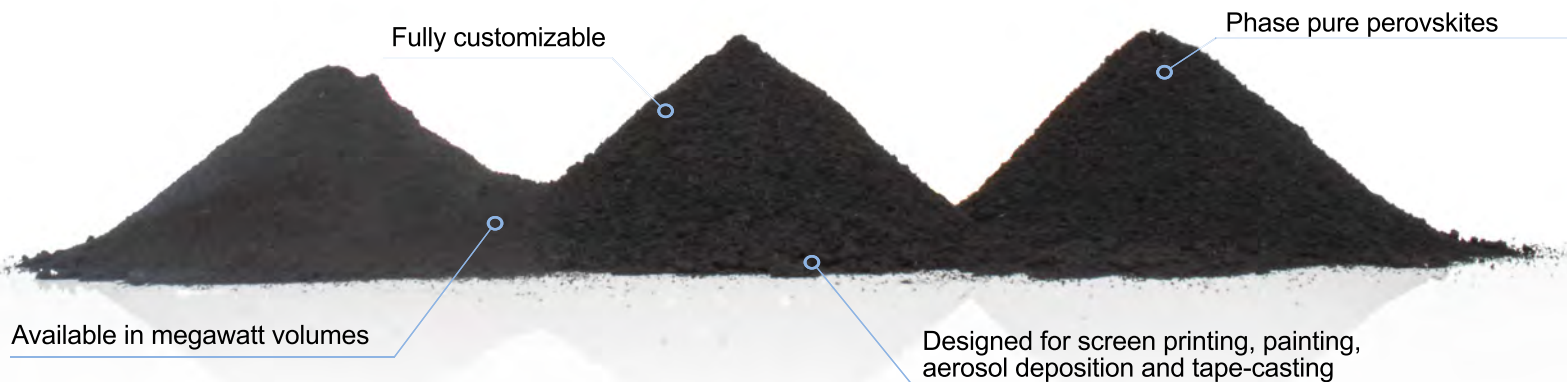
Expanded manufacturing capabilities allow **fuelcellmaterials** to provide faster turn-around times to meet your tight delivery needs.



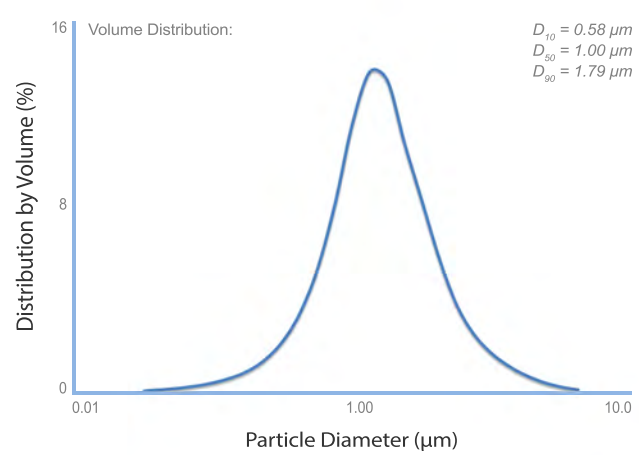
## **A Step Above with Inks and Pastes**

Fabricate your own cells and enhance overall performance with cathode inks and pastes. Cathode powders are designed for a wide range of processing approaches, including screen printing, painting, aerosol deposition and tape-casting. Cathode powders can be provided in a paste form so you can focus on developing your core technology.

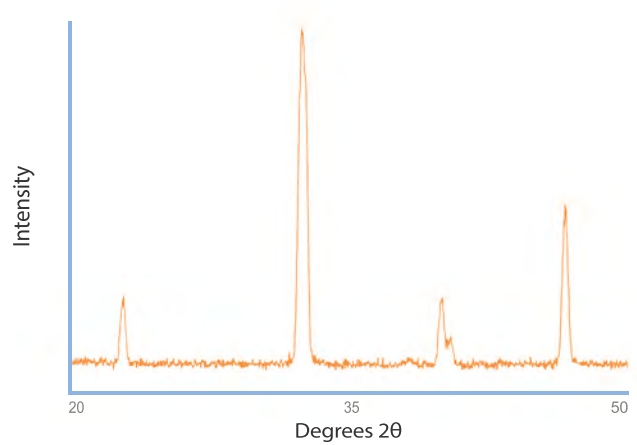
**The materials you need available in all the forms you want.**



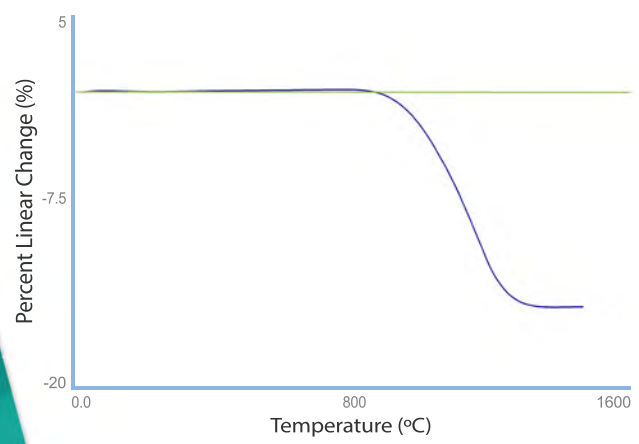
## Particle Size Distribution



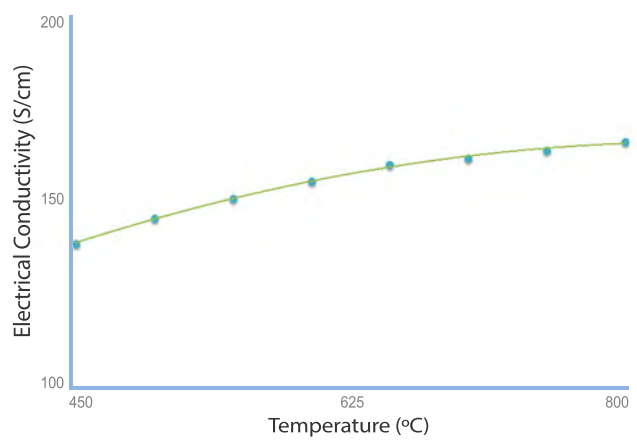
## X-Ray Diffraction



## Dilatometry



## Electrical Conductivity



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**fuelcellmaterials.com**  
 404 ENTERPRISE DRIVE P: 614-635-2025  
 LEWIS CENTER, OH 43035 F: 614-842-6607  
[sales@fuelcellmaterials.com](mailto:sales@fuelcellmaterials.com)