



Premium SOFC Powders for Researchers, Developers, and Manufacturers

The **Premium Powders** is the newest addition to the materials product line at **fuelcellmaterials.com**. The result of development experience at NexTech Materials, Premium Powders are tailored to provide enhanced sintering performance and lower processing temperatures. Continuing the tradition of high quality products with batch-to-batch reproducibility, these high surface area products are designed broaden the processing range for SOFC developers. With more processes and process temperatures available, even wider ranges of microstructures can be attained.

In keeping with a Premium Product offering, **fuelcellmaterials.com** has developed a premium characterization package. Every order of Premium Products is accompanied by these analyses, assuring quality and providing peace of mind that your developments are founded on solid materials science. Available in hard copy and electronic format, the measurements include physical, chemical and electrical characterization of the powders and sintered bodies. This thorough characterization provides a baseline for customer evaluation, allowing researchers to focus on their specific goals, rather than product qualification.

Premium Powders are available in laboratory volumes (500 g minimum) to large-scale orders (25 kg+). For industrial users, these materials can be obtained under blanket orders or other supply agreements.

Characterization

Characterization of Premium Powders are the most comprehensive and detailed in the industry. Every lot of Premium Powders purchased will be provided with a detailed hard-copy portfolio and a USB flash drive, in Excel™ format. Material characterization includes:

- Physical properties – *particle size distribution graphs as well as surface area*
- Crystallographic structure – *detailed SEM powder and microstructure images with XRD charts*
- Sintering performance – *dilatometry charts with raw data included*
- Electrical conductivity

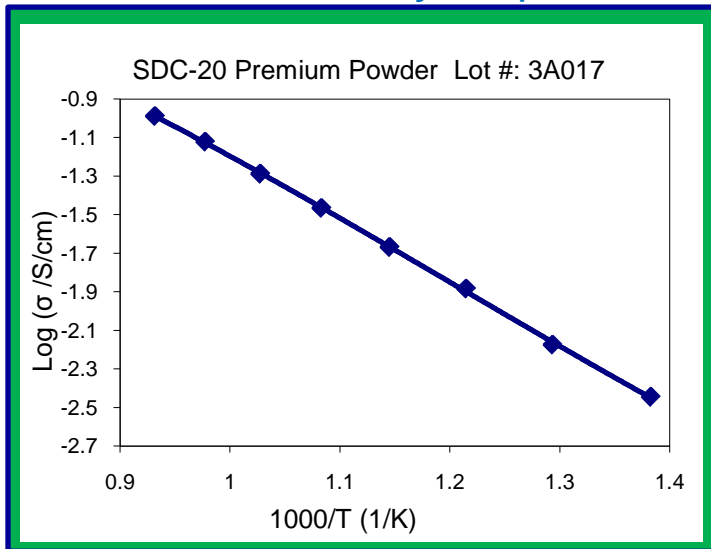
What to Expect and When

Currently the first four Premium Powders, two cathodes (LSM-20 and LSCF-6428) and two electrolytes (SDC-20 and GDC-10) are available through **fuelcellmaterials.com** and its worldwide distribution network. By the end of 2009, **fuelcellmaterials.com** will introduce two additional cathode materials (LSF-40 and $Mn_{1.5}Co_{1.5}O_4$) to the Premium Powder line. As always, **fuelcellmaterials.com** continues to refine its product offering to customer needs. Should our line of products not meet your specific needs, custom products are always available upon request. Contact **fuelcellmaterials.com** to learn more about these development opportunities.

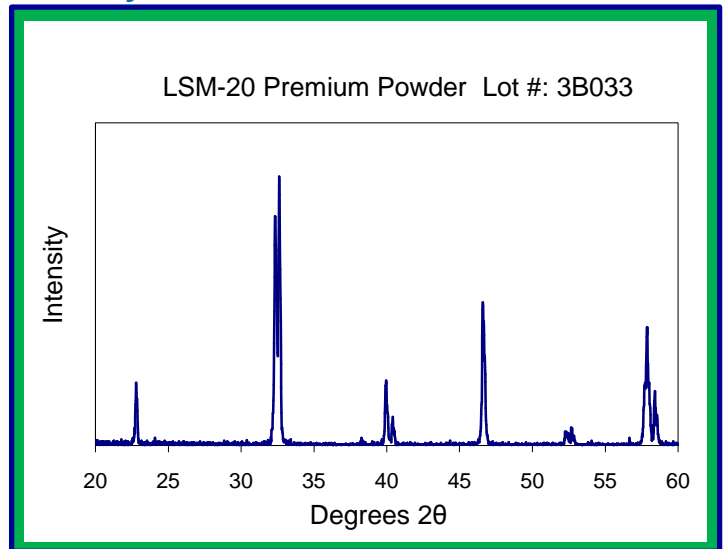


Industry Leading Characterization

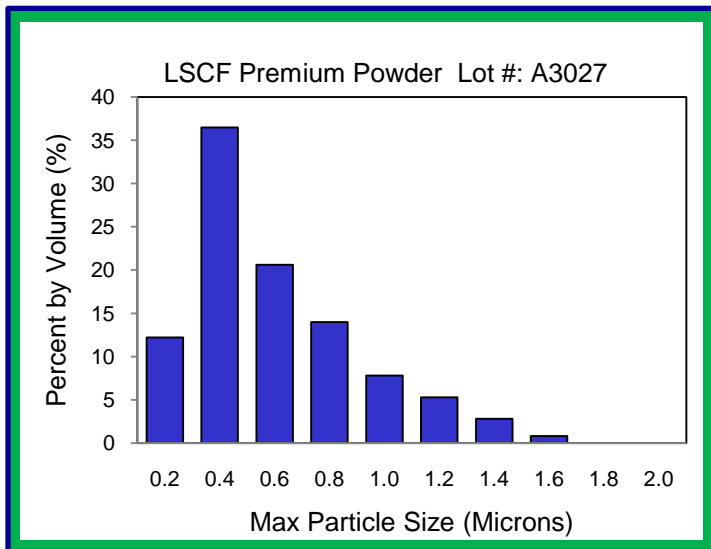
Electrical Conductivity Graph



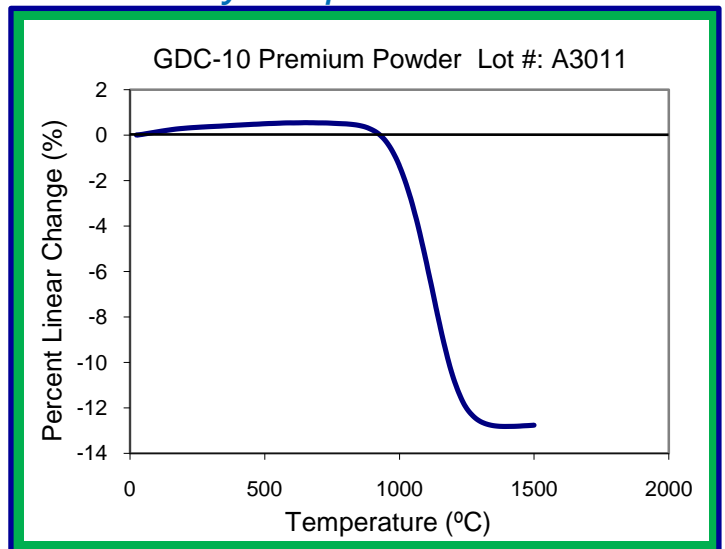
X-Ray Diffraction



Particle Size Distribution



Dilatometry Graph



The values reported on this data sheet are to be considered typical and do not imply essential representation of the product specification. The information contained herein is believed to be accurate and reliable but is presented without guarantee or implied warranty of merchantability or fitness on the part of fuelcellmaterials.com. Further, nothing presented herein should be interpreted as an authorization or inducement to infringe any relevant patent. Under no circumstances shall fuelcellmaterials.com be liable for direct, incidental, consequential or other damages regardless of legal theory, arising out of the use or handling of the product or products referred to herein. The sole remedy of the buyer for any claims shall be limited to the buyer's purchase price. Technical advice is accepted at the buyers risk and is not a warranty.

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