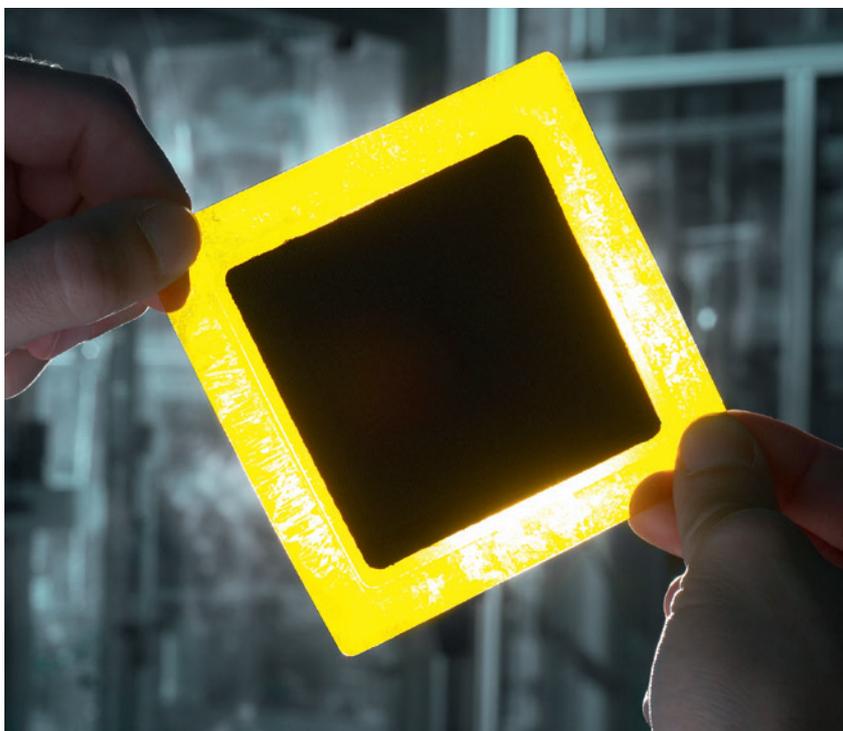


Celtec®-P membrane electrode assemblies for high-temperature PEM fuel cells



Celtec®-P membrane electrode assemblies

BASF offers a membrane electrode assembly (MEA) for high-temperature PEM fuel cells. This MEA operates at temperatures between 120 and 180 °C and can tolerate large concentrations of carbon monoxide as well as being able to run independently of humidification. This technology enables fuel cell systems to become simpler and more cost effective.

MEA designs

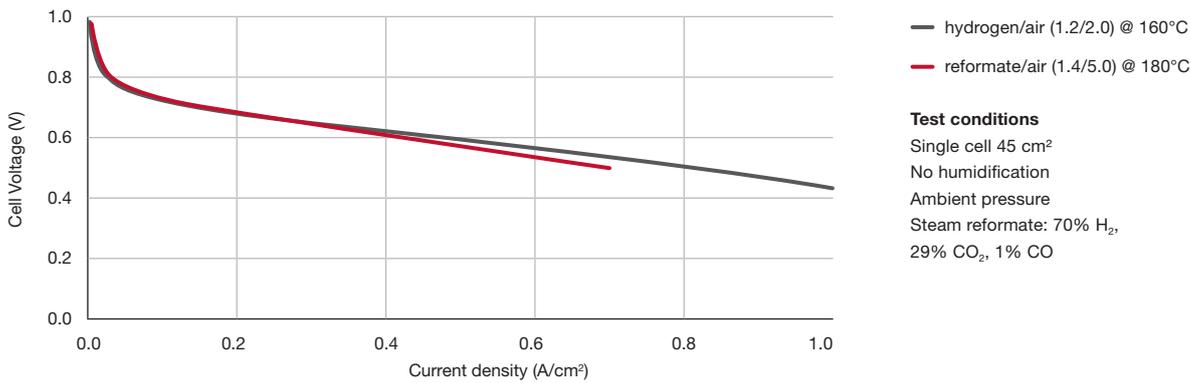
BASF offers standard MEA designs as well as tailored, customized MEAs:

- Celtec®-P MEA 45 cm²
- Celtec®-P MEA 165 cm²
- Celtec®-P MEA 300 cm²
- Celtec®-P MEA 605 cm²

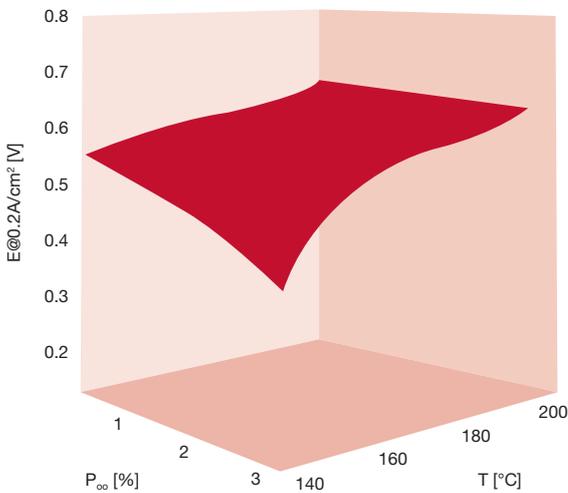
Applications and properties of Celtec®-P MEA

Applications	Properties
Backup power	Based on polybenzimidazole and phosphoric acid
Combined heat, power and cooling	Operating temperature 120 to 180 °C
Auxiliary power units	High carbon monoxide tolerance
Battery range extender	No humidification necessary Long-term stability > 20,000 h (in lab)

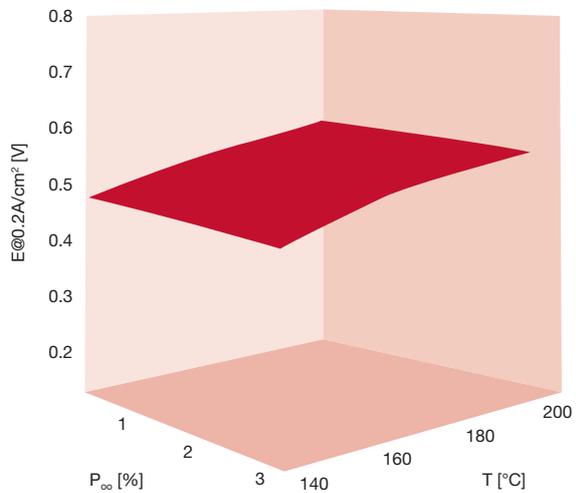
Performance



High CO tolerance enables simplified purification



Performance is robust against changes in humidification



Want to know more? Please contact us:

Europe	USA	Japan	Korea	China
Dr. Carsten Henschel	Raj Agrawal	Yoshifumi Takemoto	Han Yu	Pearl Chen
Phone: +49 621 60-47866	Phone: +1 346-252-4225	Phone: +81 3 3796-5273	Phone: +82 2 3707-3125	Phone: +886 2 2518 7678
Mobile: +49 172 6608868	Mobile: +1 832-451-8291	Mobile: +81 90 9541-6161	Mobile: +82 10 2829-1346	Mobile: +886 972 328112
carsten.henschel@basf.com	rajat.agrawal@basf.com	yoshifumi.takemoto@basf.com	han.yu@basf.com	pearl.chen@basf.com

Published by BASF New Business GmbH, Benckiserplatz 1, 67059 Ludwigshafen, Germany

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. The agreed contractual quality of the product results exclusively from the statements made in the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed. When handling these products, advice and information given in the safety data sheet must be complied with. Further, protective and workplace hygiene measures adequate for handling chemicals must be observed.

® = registered trademark of the BASF Group