



Beyond Battery Pte. Ltd.
 sales@beyond-battery.com
 www.beyond-battery.com

Product Information

Product Number: CNB-1-TC14

Product Name: TORAY CARBON FIBER PAPER WITH MPL -TGP-H-090 (HYDROPHOBIC)

CAS Number: 7782-42-5

Specifications

Thickness	0.28mm
Bulk Density	0.44g/cm ²
Porosity	78%
Surface Roughness Ra	8μm
Gas Permeability	1700ml·mm/[cm ² ·hr·mmAq]
Electrical Resistivity Through Plane in Plane	80mΩcm
Thermal Conductivity	5.6mΩcm
Through Plane(Room Temp)	1.7W/[m·k]
Inplane (Room Temp)	21W/[m·k]
Inplane (100°C)	23W/[m·k]
Coefficient of Thermal Expansion in Plane[25-100°C]	-0.8
Flexural Strength	40MPa
Flexural Modulus	10GPa
Tensile Strength	70N/cm

Applications



beyond battery

Beyond Battery Pte. Ltd.
sales@beyond-battery.com
www.beyond-battery.com

Toray paper TGP-H-090 is a carbon fiber composite paper suitable for use as a catalyst backing layer for fuel cells, electrolyzers, batteries, and various other electrochemical devices after applying a microporous layer (MPL) onto it. The carbon paper substrate has a thickness of 280um and the MPL has a thickness of 60 microns. This product has a total thickness of approximately 340microns. Toray Paper 090 has a PTFE treatment of approx. 8-9% and the MPL has a PTFE content of approx. 33-35%. Toray Carbon paper 090 with MPL is a great low-cost alternative to conventional woven carbon cloth Gas Diffusion Layer (GDL) materials.

Storage

Recommend to store Toray paper TGP-H-090 in a dry place away from direct sunlight and power cords. When stored under these recommended storage conditions, Toray paper TGP-H-090 will remain within the specifications for a period of at least 12 months after delivery.

Safety and handling

Please refer to the Safety Data Sheet (SDS) for further information on the safe storage, use and handling of Toray paper TGP-H-090. This information should be thoroughly reviewed prior to acceptance of this product. The SDS is available at www.beyond-batterys.com.