



Beyond Battery Pte. Ltd.
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Product Information

Product Number: CNB-1-SC19, CNB-1-SC20, CNB-1-SC21, CNB-1-SC22, CNB-1-SC23

Product Name: SIGRACET GAS DIFFUSION LAYER CARBON PAPER

CAS Number: /

Specifications

Basic Film Properties	22BB	28BC	29BC	36BB	39BB
Thickness (mm)	0.215±0.020	0.235±0.025	0.235±0.025	0.280±0.020	0.315±0.020
Areal Weight (g/m ²)	70±15	105±10	90±10	105±15	95±15
Electrical Resistivity (mΩ·cm ²)	<10	<11	<12	<12	<13
Thermal Conductivity (W/[m·k])	0.30	0.38	/	0.43	0.20
Bending Stiffness (N·m)	1.5/0.9	1.7/1.2	/	3.6/3.2	3.5/2.9
Gas Permeability (Gurley sec)	1.2	4.5	/	3.0	1.5
Compressibility (1.0Mpa)	20%	11%	19%	14%	27%
Water Contact Angle (MPL)	>130°	>130°	/	>130°	>130°
Roughness (μm)	7.2	6.4	/	5.8	7.0
Fe, Co, Ni Impurities (ppm)	<10	<10	/	<10	<10
Tensile Strength (MPa)	6.9/4.6	6.6/5.1	/	8.5/8.1	7.7/4.9
Substrate PTFE Treatment	5%	5%	5%	5%	5%
Microporous Layer	Yes, on one side	Yes, on one side	Yes, on one side	Yes, on one side	Yes, on one side

Applications



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The newly improved Sigracet carbon fiber paper series gas diffusion layers are intended to combine the required production robustness and the excellent performance properties in which stack developers and assemblers are benefiting from: Greatly improved homogeneity inter-lot and intra-lot. The overall variability has been shown to be better than +/- 10% (2 sigma); Greatly improved surface flatness; Greatly reduced occurrence of faulty spots on a roll; Best performance under various operating conditions.

Storage

Recommend to store Sigracet Gas Diffusion Layer Carbon Paper in a dry place away from direct sunlight and power cords. When stored under these recommended storage conditions, Sigracet Gas Diffusion Layer Carbon Paper 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 Sigracet Gas Diffusion Layer Carbon Paper. This information should be thoroughly reviewed prior to acceptance of this product. The SDS is available at www.beyond-batterys.com.