

Celgard® 5550

Monolayer Microporous Membrane Laminated to Non-Woven Membrane

Product Name & Description

Celgard® 5550
25µm Monolayer Microporous Membrane (PP)
Laminated to a Non-Woven Membrane (PP)
Surfactant Coated

Primary Applications

Zinc-Air Batteries

Product Benefits

- · Thick, multilayer construction provides increased strength and high puncture resistance
- PP non-woven laminate enables high electrolyte retention for long working life
- · Low electrical impedance provides high-rate capabilities
- Surfactant coated for rapid wetting

Packaging

Please contact your Celgard representative for more information on product roll lengths and slit widths.

Technical Data (Typical Properties)

Basic Film Properties	Unit of Measure	Typical Value
Total Film Thickness	μm	102
Total Film Gurley (ASTM)	Seconds	9
Coat Wet Out (max – internal method)	seconds	30

Microporous Membrane (Typical Properties)

Basic Film Properties	Unit of Measure	Typical Value
Thickness	μm	25
Gurley (JIS)	Seconds	200
Porosity (Calculated)	%	55
TD Shrinkage @ 90°C / 1 Hour (typical)	%	0
MD Shrinkage @ 90°C / 1 Hour (typical / max)	%	1.1 / 5.0
TD Tensile Strength (typical / min)	Kg/cm ²	130 / 80
MD Tensile Strength (typical / min)	Kg/cm ²	1170 / 770
Puncture Strength (typical / min)	Grams Force (gf)	325 / 200

At the Center of Membrane Innovation



Contact Information

United States

Headquarters, Manufacturing and R&D at Charlotte 13800 South Lakes Drive Charlotte, North Carolina 28273 United States

Phone: +1 704-588-5310 Fax: +1 704-588-5319

China

Manufacturing & Distribution
Polypore (Shanghai) Membrane
Products Co., Ltd.
L1 3rd Floor, No. 207 Tai Gu Road
WaiGaoQiao Free Trade Zone,
Shanghai 200131, P.R. China

Phone: +86(21) 5866 6200 Fax: +86(21) 5868 2891 Manufacturing and R&D at Concord 390 Business Boulevard Concord, North Carolina 28027 United States Phone: +1 704-720-5200

Fax: +1 704-720-5211

Sales & Technical Service
Celgard Sales Office
Room 1503-1506, Block 6, Lane 3611
Zhangyang Road
Jinqiao International Plaza,
Pudong New District
Shanghai, PR China 200136

Phone: +86 21 3813 9910 Fax: +86 21 3813 9911

Europe, Middle East & Africa (EMEA)

Sales & Technical Service BP 90149 25 Rue de Westrich Sélestat Cedex 67603 France

Phone: +33 3 88 82 41 08 Fax: +33 3 55 03 59 03

Korea

Sales & Technical Service
Polypore Korea, Ltd.
B-506 10, Baekseokgongdan 1-ro,
Seobuk-gu, Cheonan-si,
Chungcheongnam-do,31094
Republic of South Korea
Phone: +82 41-905-6001

Phone: +82 41-905-6001 Fax: +82 41-905-6099

Japan

Sales & Technical Service
Polypore K.K.
Hibiya Mitsui Tower
1-1-2 Yurakucho, Chiyoda-ku,
Toyko, 100-0006 Japan

Phone: +81 3-6891-3750 Fax: +81 3-6891-3769

India & South Asia

Sales & Technical Service
Pragati Mahalakshmi Building,
Ground Floor, Site No. 62,
New PID No. 11-51-62, 1st Main Road,
3rd Cross, Industrial Suburb II Stage,
Yeshwanthpura,
Bangalore, India 560022

Phone: +91 80 4256 1104 Fax: +91 80 4256 1106



DISCLAIMER, LIMITED WARRANTY: This product is to be used only by persons familiar with its use. It must be maintained within the stated limitations. Most non-developmental, purchased Celgard products are sold subject to Celgard's then current Sales T&C's. No other warranty is expressed or implied. Purchaser assumes all responsibility for the use and safety of this product. To the best of our knowledge, the information contained herein is accurate. However, neither CELGARD, LLC nor any of its affiliates assumes any liability whatsoever for the accuracy or completeness of this information. Final determination of the suitability of any material and whether there is any infringement of patents is the sole responsibility of the user. Users of any substance should satisfy themselves by independent investigation that the material can be used safely. We may have described certain hazards, but we cannot guarantee that these are the only hazards that exist. An Article Information Sheet may be available upon request. This product may be provided in confidence under NDA and as such is Celgard Confidential.

CELGARD and the CELGARD LOGO are trademarks of CELGARD, LLC. ©2025 CELGARD, LLC. All Rights Reserved. 4/25

Please download an updated version of this document at www.celgard.com/literature after 4/30/27



At the Center of Membrane Innovation