# CELGARD

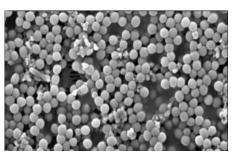
# **Celgard® QT17P2HX** Super Thin-Adhesive Coated Microporous Trilayer Membrane

## Product Name & Description

Celgard<sup>®</sup> QT17P2HX 16.5<sup>1</sup> μm Two-Sided Super Thin-Adhesive Coated Microporous Trilayer Membrane (PP/PE/PP) <sup>1</sup> Average as-coated thickness, 16 μm after lamination

## **Primary Applications**

**High Power** Lithium-Ion Battery Systems that need heat and pressure activated dry and wet electrode-separator adhesion



SEM images for illustrative purposes only

### **Product Benefits**

- · Suitable for cost-effective high-speed lamination and heat press processes in cell manufacturing
- Helps improve cell productivity and mechanical strength by stabilizing electrode and separator interfaces in dry (during assembly) and wet (during and following electrolyte filling) states
- Enhances battery cycle life by improving wettability, reducing electrical resistance at the electrode separator interface and by increasing resistance to degradation by oxidation in high voltage applications
- Offers significant advantages of Celgard<sup>®</sup> low-impedance trilayer base films and water-based coating
- Designed to minimize slit roll self-adhesion<sup>2</sup>
- No interlayer film needed

<sup>2</sup> When stored in the original packaging in low-humidity / below 77° F [25 ° C] without direct sunlight

## 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 |
|--|--------------------|---------------|
| Thickness  | μm                 | 16.5          |
| Gurley (JIS)   | Seconds            | 190           |
| Porosity (Calculated)                                      | %                  | 50            |
| TD Shrinkage @ 105°C / 1 Hour (typical)                    | %                  | 0             |
| MD Shrinkage @ 105°C / 1 Hour (typical / max) <sup>3</sup> | %                  | 3.0 / 8.0     |
| TD Tensile Strength (typical / min)                        | Kg/cm <sup>2</sup> | 135 / 110     |
| MD Tensile Strength (typical / min)                        | Kg/cm <sup>2</sup> | 1950 / 1550   |
| Puncture Strength (typical / min)                          | Grams Force (gf)   | 360 / 340     |

<sup>3</sup> Free-standing film; shrinkage is zero for films laminated to electrodes Protected by one or more patents and/or patents pending

At the Center of Membrane Innovation

# Asahi KASEI

# <u>CELGARD</u>

# **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

Room 1503-1506, Block 6, Lane 3611

Sales & Technical Service

Jingiao International Plaza,

Shanghai, PR China 200136

Phone: +86 21 3813 9910

Fax: +86 21 3813 9911

**Celgard Sales Office** 

**Pudong New District** 

Zhangyang Road

#### 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 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



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