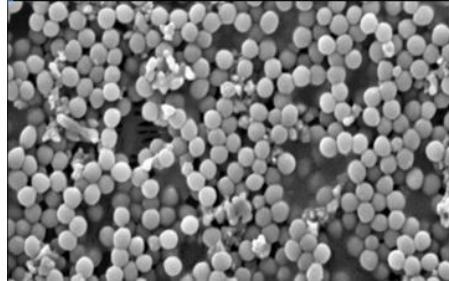


Product Name & Description

Celgard® QT17P2HX

16.5¹ µm Two-Sided Super Thin-Adhesive Coated
Microporous Trilayer Membrane (PP/PE/PP)

¹ Average as-coated thickness, 16 µm after lamination



SEM images for illustrative purposes only

Primary Applications

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

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® low-impedance trilayer base films and water-based coating
- Designed to minimize slit roll self-adhesion²
- No interlayer film needed

² 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) ³	%	3.0 / 8.0
TD Tensile Strength (typical / min)	Kg/cm ²	135 / 110
MD Tensile Strength (typical / min)	Kg/cm ²	1950 / 1550
Puncture Strength (typical / min)	Grams Force (gf)	360 / 340

³ 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

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