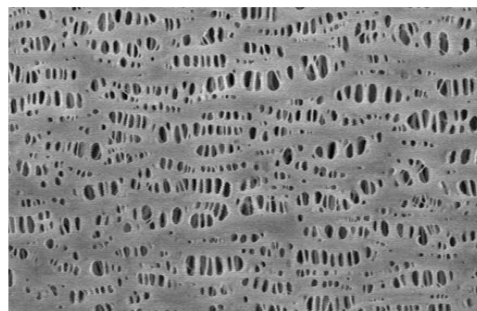


### Product Name & Description

Celgard® 3401  
 25µm Monolayer Microporous Membrane (PP)  
 Surfactant Coated



SEM images for illustrative purposes only

### Primary Applications

Aqueous Electrolyte Battery Systems

### Product Benefits

- Surfactant coated for rapid wetting
- Gas barrier provides thermal stability
- Zero TD shrinkage reduces internal shorting and improves high temperature dimensional stability
- Oxidation resistance for excellent cycling and trickle charge performance

### Technical Data (Typical Properties)

Basic Film Properties	Unit of Measure	Typical Value
Thickness	µm	25
Gurley (JIS)	Seconds	620
Porosity (calculated)	%	41
TD Shrinkage @ 90°C / 1 Hour (typical)	%	0
MD Shrinkage @ 90°C / 1 Hour (typical / max)	%	2.3 / 5.0
TD Tensile Strength (typical / min)	Kg/cm <sup>2</sup>	140 / 70
MD Tensile Strength (typical / min)	Kg/cm <sup>2</sup>	1420 / 700
Puncture Strength (typical / min)	Grams Force (gf)	450 / 340
Wettability (max)	seconds	30

### Packaging

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

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**WARRANTY:** This product is to be used only by persons familiar with its use. It must be maintained within the stated limitations. The product is warranted to be free of any manufacturing defects. 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. Review the Product Safety Data Sheet for environmental, health and safety information related to this product.

