



## What is a Celgard 3501 separator?

Commercially available Celgard 3501 separator is used in all of the mechanical tests presented here. This separator is a monolayer microporous polypropylene(semicrystalline,40% crystallinity 8) membrane with a nominal thickness of 25 um.

What is the difference between Celgard 3501 and Celgard 5550?

The notable difference between the two membranes, which might explain the large difference in zincate ion diffusion, is that Celgard® 3501 is only coated, whereas Celgard® 5550 is laminated and coated membrane.

What is the difference between PVA/Paa membrane and Celgard® 3501 membrane?

Compared to the Zn-air cell with celgard® 3501 membrane,the cell with the PVA/PAA electrolyte membrane showed a better OH - permselectivity and electrochemical properties. The membrane was effective (lowered by about a half),the Zn (OH) 42- ions crossover compared to that of the celgard® 3501 membrane.

What is the conductivity of Celgard® 3501?

For instance, Celgard® 3501 was reported to have an OH - conductivity of 12.8 mS cm -1and 80.1 wt% KOH solution (6 M) uptake at room temperature . The porous membranes commonly used (PP-based) in rechargeable batteries have an average pore size which is much larger than the size of solvated zincate ions, which results in their crossover.

Can two Celgard® 3401 membranes be used together?

The use of two Celgard® 3401 membranes (50 nm pore size) together was reported to have a lower zincate ions diffusion coefficient ( $6.9 \times 10 - 12 \mod 2 \text{ s} - 1$ ).

## Is Celgard 3501 a good cell?

In contrast, as expected, given the Dsol / Deff < 10 3 for both active materials, the cell configured with Celgard 3501 showed 2.2% capacity fade per cycle, with only 47% capacity retention over 24 cycles. Furthermore, only 52% of the theoretical capacity was accessed in the first cycle and the Coulombic efficiency was consistently lower (~90%).

Celgard offers a complete range of single- and multi-layer membrane solutions. Celgard ® separators are available in a variety of thickness and slit width options, with or without water ...

ALL PURCHASERS MUST REVIEW AND AGREE TO CELGARD'S INFORMATION SHARING AGREEMENT. Size 10 inches by 116 inches ± 8.5 inches (8 ft² ± 0.6 ft² ; 0.75 m² ± 0.05 m²) Description 25 um Microporous ...



## Celgard 3501 Bosnia and Herzegovina

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25um Microporous Monolayer Membrane PP Battery separator Celgard 3501 for Lithium Battery Lab Research. Name and Description: Model: Celgard 3501. 25um Microporous Monolayer ...

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Separators from biomass-based nanofibers hold the lowest thicknesses but the strongest tensile strengths as well as lower areal densities compared with GF separators ...



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Celgard® 3501 Monolayer Microporous Membrane Product Name & Description Celgard® 3501 25µm Monolayer Microporous Membrane (PP) Surfactant Coated Primary Applications ...

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