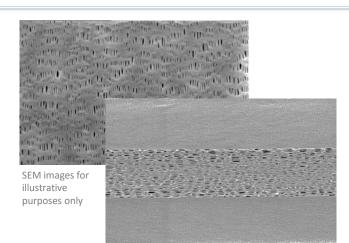
CELGARD Celgard[®] 2318 Trilayer Microporous Membrane

Product Name & Description

Celgard[®] 2318 18µm Trilayer Microporous Membrane (PP/PE/PP)

Primary Applications

High Energy Lithium Battery Systems; especially those that require exceptional safety and energy density advantages



Product Benefits

- Zero TD shrinkage reduces internal shorting
- Uniform pore structure with high chemical & thermal stability
- Medium porosity provides excellent energy performance with low self-discharge
- PP outer layer provides high temperature melt integrity, oxidation resistance
- PE inner layer provides high-speed shutdown features
- Offers increased energy density and exceptional safety performance

Technical Data (Typical Properties)

Basic Film Properties	Unit of Measure	Typical Value
Thickness	μm	18
Gurley (JIS)	Seconds	520
Porosity (calculated)	%	39
TD Shrinkage @ 105°C / 1 Hour (typical)	%	0
MD Shrinkage @ 105°C / 1 Hour (typical / max)	%	2.0 / 8.0
TD Tensile Strength (typical / min)	Kg/cm ²	130 / 100
MD Tensile Strength (typical / min)	Kg/cm ²	2250 / 1500
Puncture Strength (typical / min)	Grams Force (gf)	430 / 340

Packaging

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

CELGARD

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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.

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