<u>CELGARD</u>

Celgard[®] H1612 Trilayer Microporous Membrane

Product Name & Description

Celgard[®] H1612 16µm Trilayer Microporous Membrane (PP/PE/PP)

Primary Applications

High Energy Lithium-Ion Battery Systems; especially those that require additional safety advantages

Product Benefits

- Zero TD shrinkage reduces internal shorting
- Uniform pore structure with high chemical & thermal stability
- High porosity for excellent high-rate performance
- PP outer layer provides high temperature melt integrity, oxidation resistance
- PE inner layer provides high-speed shutdown features

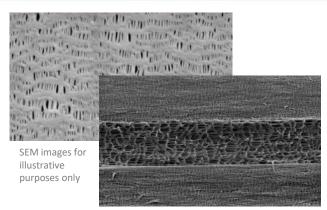
Packaging

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
Gurley (JIS)	Seconds	240
Porosity (Calculated)	%	44
TD Shrinkage @ 105°C / 1 Hour (typical)	%	0
MD Shrinkage @ 105°C / 1 Hour (typical / max)	%	4.2 / 6.0
TD Tensile Strength (typical / min)	Kg/cm ²	140 / 100
MD Tensile Strength (typical / min)	Kg/cm ²	2080 / 1350
Puncture Strength (typical / min)	Grams Force (gf)	350 / 280

At the Center of Membrane Innovation



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