

Nafion Membrane

One of the most common and commercially available PEM membrane is, DuPont's Nafion membranes. These are widely used for PEM fuel cells and can be identified based on the variety of thickness and specific application. Nafion® XL membranes are newly developed reinforced membranes that enhance the chemical stability of Nafion® membranes. Nafion® HP membranes are an ultra-thin membrane. These membranes are reinforced and designed for lower relative humidity environments and high operating temperature.

	Dimensions	Thickness, μm / millimeter	Conductivity, S/cm	Acid capacity, emq/g	Hydrogen crossover, ml/min-cm ²
EC-NM-HP Nafion HP	30cm x 30cm	20 / 0.8	In-Plane > 72.0 Through-Plane > 50.0	-	<0.45
EC-NM-XL Nafion XL	30cm x 30cm	27.5 / 1.1	In-Plane > 72.0 Through-Plane > 50.0	-	<0.015
EC-NM-211 Nafion 211	30cm x 30cm	25.4 / 1.0	> 0.10	0.95 to 1.01	<0.020
EC-NM-212 Nafion 212	30cm x 30cm	50.8 / 2.0			<0.010
EC-NM-115 Nafion 115	30cm x 30cm	127 / 5.0			-
EC-NM-117 Nafion 117	30cm x 30cm	183 / 7.0			-
EC-NM-1110 Nafion 1110	30cm x 30cm	254 / 10.0			-

		Thickness, μm	Conductivity, S/cm	Acid capacity, emq/g	Hydrogen crossover, ml/min-cm ²
EC-NM-211-Pak	Nafion 211, 4" x 4", 4 Pieces	25.4 / 1.0	0.1	0.95 to 1.01	<0.020
EC-NM-212-Pak	Nafion 212, 4" x 4", 4 Pieces	50.8 / 2.0	0.1	0.95 to 1.01	<0.010
EC-NM-115-Pak	Nafion 115, 4" x 4", 4 Pieces	127 / 5.0	0.1	0.95 to 1.01	-
EC-NM-117-Pak	Nafion 117, 4" x 4", 4 Pieces	183 / 7.0	0.1	0.95 to 1.01	-

This Pak contains one each of our most popular Nafion membrane offerings: Nafion 115, 117, 211 and 212. Each piece is 10cm x 10cm.

		Thickness, μm	Conductivity, S/cm	Acid capacity, emq/g	Hydrogen crossover, ml/min-cm ²
EC-Varipak-NM	1 Each: Nafion 115,117,211,212 4" x4"	Varies	0.1	Varies	Varies

www.fuelcell.com

www.electrocheminc.com

1.781.938.5300
sales@fuelcell.com