

# Nafion<sup>®</sup> Ion-Exchange Membranes

Perfluorocarbonsulfonic acid based ionomers, of which Nafion<sup>®</sup> is prototypical, are the focus of extensive studies for their use as solid polymer electrolytes in PEM fuel cells, gas sensors, and other electrochemical devices. Membrane thickness has been shown to have a significant influence on gas permeability and consequently on other key parameters associated with the electrochemical device. The table below summarizes the range of Nafion<sup>®</sup> membranes offered by Aldrich, including some recent additions, arranged in order of increasing thickness. For a complete list of Nafion<sup>®</sup> products from Aldrich, browse through the **Products by Category Section** of the **NEW Aldrich Polymer Products CD-Catalog and Reference Guide**. Request your FREE CD as explained below.

Catalog No.	Nafion <sup>®</sup> Product Description	Membrane Thickness (inches)	Equivalent Weight	Membrane Dimensions (inches)	Price (\$/ea)
<b>54,126-5</b> <small>NEW!</small>	Nafion <sup>®</sup> 112	0.002	1,100	12 X 12	
<b>54,130-3</b> <small>NEW!</small>	Nafion <sup>®</sup> 1035	0.0035	1,000	12 X 12	
<b>54,131-1</b> <small>NEW!</small>	Nafion <sup>®</sup> 1135	0.0035	1,100	12 X 12	
<b>54,133-8</b> <small>NEW!</small>	Nafion <sup>®</sup> 105	0.005	1,000	12 X 12	
<b>54,134-6</b> <small>NEW!</small>	Nafion <sup>®</sup> 115	0.005	1,100	12 X 12	
<b>29,256-7</b>	Nafion <sup>®</sup> 117	0.007	1,100	12 X 12	
<b>27,467-4</b>	Nafion <sup>®</sup> 117	0.007	1,100	8 X 10	
<b>45,473-7</b>	Nafion <sup>®</sup> 350, reinforced with Teflon <sup>®</sup>	0.010	1,100	8 X 10	
<b>27,468-2</b>	Nafion <sup>®</sup> 417 reinforced w/ Teflon <sup>®</sup> , Dacron <sup>®</sup>	0.017	1,100	4 X 5	
<b>39,334-7</b>	Nafion <sup>®</sup> NE 450 reinforced w/ Teflon <sup>®</sup>	0.017	1,100	12 X 12	
<b>49,578-6</b> <small>NEW!</small>	Nafion <sup>®</sup> (perfluorinated ion-exchange powder)	-	1,100	500mg	

Larger quantities are available through Sigma-Aldrich Fine Chemicals. Please call **800-336-9719 (USA)** or **314-534-4900**, or your local office for availability.

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