



Nafion™ DE 2029

Ion Exchange Materials

Perfluorosulfonic Acid (PFSA) Polymer Dispersions

Product Information

Description

Nafion™ PFSA polymer dispersions are made from chemically stabilized perfluorosulfonic acid/polytetrafluoroethylene (PTFE) copolymer in the acid (H⁺) form and are available in several polymer content and

dispersant compositions. Typical uses include fabrication of thin films and coating formulations for fuel cell membranes, catalyst coatings, sensors, and a variety of electrochemical applications.

Typical Composition

Property*	Nafion™ PFSA Polymer Dispersion DE 2029
Polymer Content, wt%	20.0 min./22.0 max.
Water Content, wt%	34 ± 4
VOC Content, wt%	45 ± 4
1-Propanol	44 ± 4
Ethanol	<5
Mixed Ethers and Other VOCs	<2
Specific Gravity at 25 °C (77 °F)	1.01-1.03
Available Acid Capacity, meq/g, H ⁺ polymer basis	>1.10
Total Acid Capacity, meq/g, H ⁺ polymer basis	1.10-1.18
Viscosity, cP at 25 °C (77 °F) and 40 sec ⁻¹ Shear Rate	50-500
Color, APHA-10 mm	<200
Metal Ion Content, ppm	
Iron	<50
Chromium	<50
Nickel	<50
Potassium	<100

*Property values for Nafion™ PFSA polymer dispersions are subject to change. Indicated values are "typical" for current developmental product.

Order Information

Dispersions are available in the following containers (4-L minimum order):

- 4-L container package (air or land delivery)
- 20-L container (air or land delivery)
- 190-L drum (land delivery)

Packaging

Nafion™ PFSA polymer dispersions in 4- and 20-L plastic containers are packaged in fiberboard shippers that meet DOT and UN standards for both domestic and international ground and air shipments.

Safe Handling and Use of Nafion™ PFSA Polymer Dispersions

The following information should be reviewed before handling and processing Nafion™ PFSA polymer dispersions:

- Safety data sheets for Nafion™ PFSA polymer dispersions
- Nafion™ technical information bulletin, T-01, "Safety in Handling and Use"
- "Guide to Safe Handling of Fluoropolymer Resins", Third Edition, June 1998, Published by the Fluoropolymers Division of the Society of the Plastics Industry, Inc.

The data listed here fall within the normal range of product properties, but they should not be used to establish specification limits nor used alone as the basis of design. This information is based on technical data that Chemours believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. This information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards. Because conditions of product use are outside our control, Chemours makes no warranties, express or implied, and assumes no obligation or liability in connection with any use of this information or for results obtained in reliance thereon. The disclosure of the information is not a license to operate under or a recommendation to infringe any patent of Chemours or others.

Medical Statement: Please contact your Chemours representative to discuss limitations regarding medical applications.

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