

SooH™

PFSA Ionomer Dispersion

SYNOPEX

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SYNOPEX

Green Development

PFSA ionomer dispersion

PFSA (perfluorosulfonic acid) ionomer is a hydrophilic polymer with high hydrogen ion conductivity. It is mainly used in electr olyte membrane, electrode binder of polymer electrolyte fuel c ell that uses hydrogen as fuel. It is used in dispersion form for th e purpose of maximizing processability and catalyst utilization r ate. High uniformity and fine particle size of the PFSA particles i n the dispersion makes it possible to manufacture high density membranes and high-efficiency electrodes, resulting in high pe rformance and cost savings.

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PFSA ionomer dispersion, SooH™

SooH™, the ionomer dispersion brand of SYNOPEX, is a brand n amed in the Sulfonic group of H^+ form PFSA ionomer. It is a pro duct developed by grafting 'ionomer nano dispersion' manufa cturing technology onto 'filtration technology' of SYNOPEX. th rough performing the national task 'Localization of Perfluorina ted sulfonic acid Ionomer-PTFE Reinforced Membrane for Auto mobile Fue l Cells', SYNOPEX has got the control technology of dispersion pro perty, and 'SooH™', which is born from this. SOO H™ provide more uniform and finer quality than conventional PFSA dispersions. In addition, it offer customers a wide range o f material properties. SYNOPEX will do best to customer by sup plying the best products with continuous PFSA dispersion rese arch and active customer response.



1. High particle uniformity
Nano dispersion and filtration technologies are combined to ensure particle uniformity

2. convenience
Provides ease of use through control of dispersion composition

3. productivity
Reduction of manufacturing time due to rapid solvent evaporation

4. profitable
Reduction of processing and shipping cost compared with foreign production by domestic production

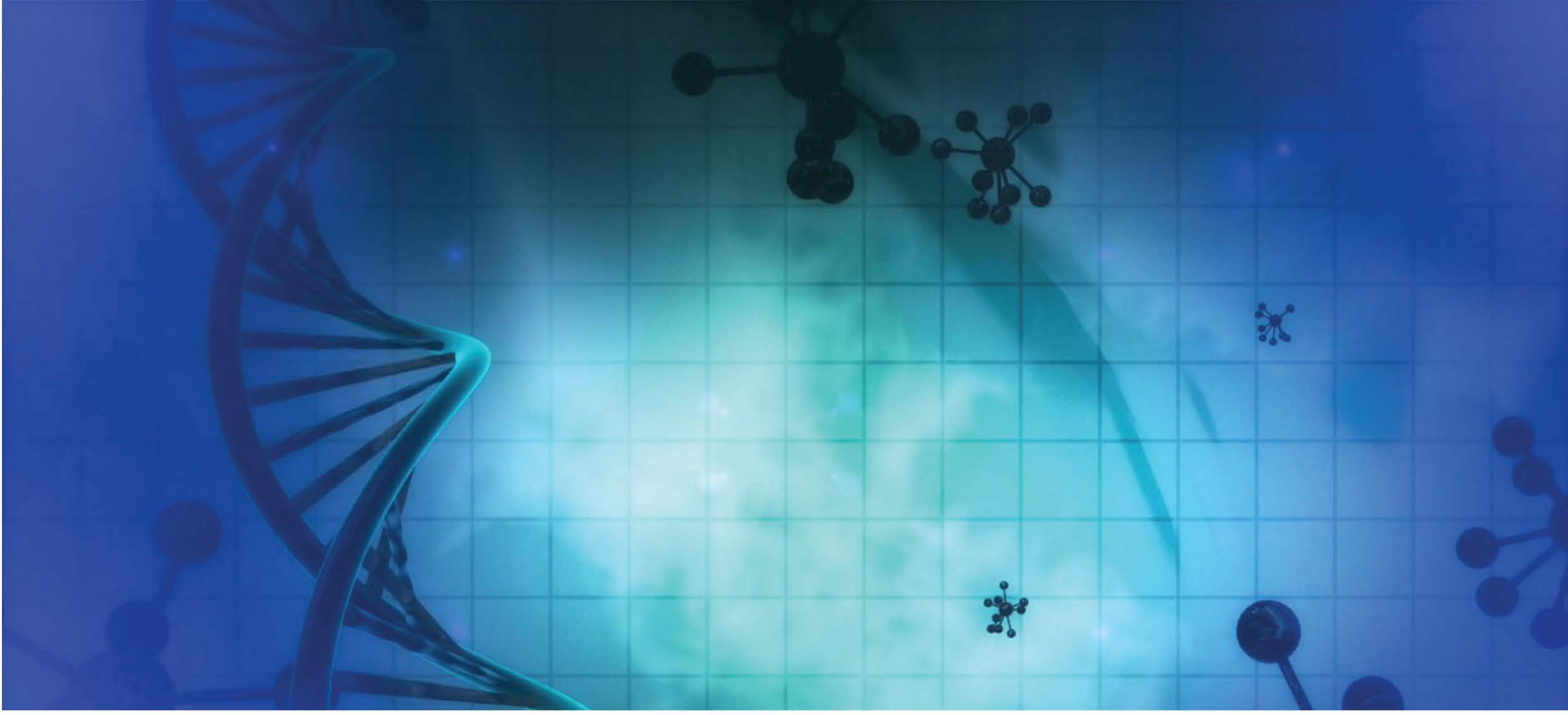
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Product details

Property	SooH™
Equivalent weight (g/mol, H+ form)	725, 800, 1100
Water Content, wt%	40-60
Alcohol Content, wt%	40-60
Polymer Content, wt%	~15
Specific Gravity, $g.cm^{-2}$	1.1±0.1
Viscosity, cP, at 20 °C	~200
Applications	Bare electrolyte membrane Reinforced polymer electrolyte membranes Electrode binder Membranes for electrolysis

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Product model

Product code

PD (PFSA Dispersion)	T (Brand)	1 (Equivalent weight)	3 (Solvent)	15 (Concentration, wt%)
3M	T	1=725 2=800	1=Ethanol 2= IPA 3= nPA	~15%
Nafion	N	1=1100		
Aquivion	A	1=720 2=790 3=830 4=870 5=980		

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