Aquivion® PW79S-Li

perfluorosulfonic acid lithium salt

Aquivion® PW79S-Li is a coarse powder based on the short-side-chain (SSC) copolymer of Tetrafluoroethylene and the Sulfonyl Fluoride Vinyl Ether (SFVE) CF2=CF-O-(CF2)2-SO2F produced by Solvay. The resulting perfluoropolymer's functional groups are in their lithium sulfonate form, SO3Li. Aquivion® PW79S-Li is chemically stabilized (denoted by the S-suffix).

This material is characterized by a low equivalent weight and a high ionic exchange capacity. It is insoluble in water, acids or bases and in most solvents unless extreme conditions would be applied.

Aquivion® PW79S-Li can be mechanically processed into blends, films or substrate coatings and preferably accompanied or followed by a heat treatment. Furthermore, It can be dissolved in organic solvents that are dipolar aprotic such as N-ethyl-2-pyrrolidone (NEP) and dimethyl sulfoxide. To facilitate the dissolution, slightly increase the temperature to 50-60°C.

For casting processes you can also consider Aquivion® D79-25BS-Li dispersion.

Please visit Aquivion.com for more information.

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General		
Material Status	• Commercial: Active	
Availability	• Asia Pacific • Europe	• North America
Appearance	• White	
Forms	• Powder	

Physical	Typical Value	Unit	Test method
Equivalent Weight (EW) [1]	770 to 810	g/eq	Internal Method

Additional Information	Typical Value	Unit	Test method
Ionic Exchange Capacity	1.23 to 1.30	meq/g	Internal Method

HEALTH, SAFETY AND ENVIRONMENT

- Aquivion® powders are not harmful if used and handled according to standard processing procedures, such as those outlined in "The Guide to the Safe Handling of Fluoropolymer Resins" issued by the Society of the Plastics Industry. If handled inappropriately, powders may release harmful toxic chemicals. Please refer to corresponding Material Safety Data Sheets for more information on handling and safety.

PACKAGING, SHIPMENT AND STORAGE

- Aquivion® powders are delivered in standard polypropylene bottles and drums. Products should be kept closed in their original packaging.

Notes

Typical properties: these are not to be construed as specifications.

[1] eq = (mol SO3Li)