Aquivion® P98 are perfluorinated pellets in the sulfonyl fluoride (-SO2F) form that exhibit an Equivalent Weight (EW) of 980 g/eq. This material is based on the unique Short Side Chain copolymer of Tetrafluoroethylene (TFE) and Sulfonyl Fluoride Vinyl Ether (SFVE) F2C=CF-O-CF2CF2-SO2F produced by Solvay.

Aquivion® P98 resin can be easily melt extruded into a variety of shapes. The extruder should be equipped with a standard three-zone metering screw devoid of barrier or mixing elements. Optimum temperature settings will depend on the configuration of the equipment, but generally range from 200 to 300°C.

Optionally, functional groups in the molded part are then hydrolyzed in baths or wet benches with a heated base (NaOH, KOH etc) reaction which may take minutes or hours, depending on thickness and conditions.

Aquivion® P98 can be directly hydrolyzed as described, either completely or only on their outer surface. This will enable functional activity of the sulfonic acid / sulfonyl salt groups for ion-exchange operations or as an acid catalyst.

Like other fluoropolymers, Aquivion PFSA pellets are corrosive in the melt; therefore, all parts having prolonged contact with the melt should be made with corrosion-resistant materials such as Hastelloy®, Inconel®, Monel® or Xaloy®. Chrome or nickel plating is not recommended since they are typically only sufficient for brief processing tests.

Please visit Aquivion.com for more information.

---

**General**

**Material Status**
- Commercial: Active

**Availability**
- Asia Pacific
- Europe
- North America

**Appearance**
- Translucent

**Forms**
- Pellets

---

**Physical**

**Melt Mass-Flow Rate (MFR)**
- 270°C/2.16 kg: 5.0 to 20 g/10 min
- 280°C/5.0 kg: 15 to 50 g/10 min

**Equivalent Weight (EW)**
- 940 to 1020 g/eq

---

**Thermal**

**Melting Temperature**
- 230 to 250 °C

**Crystallization Heat**
- 8.00 to 10.0 J/g

**Heat of Fusion**
- 8.00 to 10.0 J/g

---

**Additional Information**

**Drying Temperature - in vacuum oven**
- 105 °C

**Drying Time**
- 20.0 hr

**Thermal Resistance**
- 350 °C
HEALTH, SAFETY AND ENVIRONMENT

- Aquivion® pellets are not harmful if used and handled according to standard processing procedures (see for example “The Guide to the Safe Handling of Fluoropolymer Resins” issued by the Society of the Plastics Industry). If handled inappropriately, pellets 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® pellets 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 Nominal value
2 eq = (mol SO2F)
3 In air, ramped 10°C/min
Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

Neither Solvay Specialty Polymers nor any of its affiliates makes any warranty, express or implied, including merchantability or fitness for use, or accepts any liability in connection with this product, related information or its use. Some applications of which Solvay’s products may be proposed to be used are regulated or restricted by applicable laws and regulations or by national or international standards and in some cases by Solvay’s recommendation, including applications of food/feed, water treatment, medical, pharmaceuticals, and personal care. Only products designated as part of the Solviva® family of biomaterials may be considered as candidates for use in implantable medical devices. The user alone must finally determine suitability of any information or products for any contemplated use in compliance with applicable law, the manner of use and whether any patents are infringed. The information and the products are for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right.

All trademarks and registered trademarks are property of the companies that comprise the Solvay Group or their respective owners.

© 2019 Solvay Specialty Polymers. All rights reserved.