# Technical Data Sheet

# SustaPVDF - ASTM

PVDF

## Typical characteristics

- High purity
- High tensile strength
- High stiffness
- High cold impact strength
- Good weldability
- High continuous service temperature
- Electrically insulating
- Chemical resistant
- Good weather resistance

## Typical industries

- Chemical Processing Industry
- Clean-Room Technology
- Electronics
- Food Industry
- Healthcare
- Mechanical Engineering Industry
- Semiconductor Front-End Wet Bench

| | Test method | Unit | Guideline value |
|---|---|---|---|
| **General properties** | | | |
| Density | ASTM D792 | g / cm$^3$ | 1.78 |
| Water Absorption 24 hours | ASTM D570 | % | 0.03 |
| Dissipation Factor | ASTM D150 | 1MHz | 0.06 |
| Water Absorption Saturation | ASTM D570 | % | 0.05 |
| **Mechanical properties** | | | |
| Hardness | ASTM D2240 | Shore D | 77 |
| Tensile Strength at yield 73°F | ASTM D638 | psi | 7000 |
| Tensile Modulus | ASTM D638 | psi | 250000 |
| Elongation at Break | ASTM D638 | % | 100 |
| Flexural Strength | ASTM D790 | psi | 8000 |
| Flexural Modulus | ASTM D790 | psi | 290000 |
| Compressive Strength | ASTM D695 | psi | 10500 |
| Rockwell Hardness | ASTM D785 | | 75 |
| Rockwell Hardness | ASTM D785 | R | 84 |
| Izod Impact, Notched | ASTM D256 | ft-lb/in | 3 |
| Coefficient of Friction, Dynamic | | | 0.58 |
| **Thermal properties** | | | |

| | Test method | Unit | Guideline value |
|---|---|---|---|
| Thermal Conductivity | | in/hr/ft$^2$ /°F | 0.75 |
| Coefficient of Linear Thermal Expansion | ASTM D696 | in/in/°F x10$^{-5}$ | 6.6 |
| Melting Point | ASTM D789 | °F | 335 |
| Continuous Service Temperature, Air | | °F | 300 |
| Deflection Temperature at 1.8Mpa (264psi) | ASTM D648 | °F | 230 |
| Deflection Temperature at 1.8Mpa (66psi) | ASTM D648 | °F | 270 |
| Flammability, UL94 | | 1/8 inch | V-0 |
| **Electrical properties** | | | |
| Dielectric constant | ASTM D150 | 1MHz | 8.5 |
| Dielectric strength | ASTM D149 | V/mil | 1600 |
| Surface resistivity | ASTM D257 | Ω/cm | >10$^{13}$ |
| **Compliance properties** | | | |
| FDA | | | Yes |
| NSF | | | No |
| USDA | | | Yes |

The data stated above are average values ascertained by statistical tests on a regular basis. The data above are provided purely for information and shall not be regarded as binding unless expressly agreed in a contract of sale.