



**TFM as a Seating Material for High Purity Valves**

*SVF Series SB7- CleanFLOW High Purity ball valves utilize Dyneon™ TFM as a standard seating material. This report will review the design features of this new material.*

**What is TFM?**

TFM-PTFE is a second-generation modified polytetra-fluoro-ethylene (PTFE) that maintains the exceptional chemical and heat resistance properties of first generations PTFE, but with significantly lower melt viscosity. This property results in better particle fusion during sintering and much smoother ball-to-seat sealing surfaces.

TFM 1600 PTFE is the blend chosen by SVF as it exhibits properties that are

ideal for ball valves in high purity applications. In addition, TFM complies with FDA and 3A requirements.

- 3A Sanitary standard for multiple-use plastic materials used as product contact surfaces for dairy equipment.
- FDA-21 CFR 177.1550 direct contact with meat or poultry food products prepared under FDA inspection.
- USP23, biological test for plastics / Class VI.

<i>Properties</i>	<i>Benefits</i>
• Lower Porosity and Permeability	Dramatically reduces surface contamination
• Reduced “cold-flow” and Deformation Under Load	Greater pressure and temperature capabilities without the need for fillers
• Lower Void Contact	Improves wear resistance
• Smoother Surfaces	Less operating torque and Reduced particle generation
• Temperature Rating	-70°F to 475°F
• Pressure Rating	1,500 psi Cold Working Pressure 150 psi Steam Pressure