

# **PS-VO SERIES**

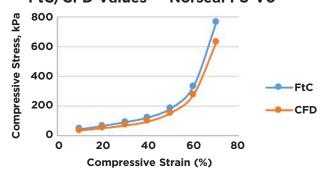
## Norseal® PS-VO Series, Micro-Cellular Polyurethane Foams

Saint-Gobain® Norseal PS-VO Series are high-performance micro-cellular polyurethane foams, specifically designed to offer UL94 V-O properties for EV and HEV battery sealing applications. By passing the vertical burn test, Norseal PS-VO Series meets the stringent safety standard for most challenging environments and applications where flame and fire protection is of the highest importance. This compressible product has similar FTC and CFD properties to premium Norseal F-20 Silicone Foam, and also features excellent water-sealing properties and compression set.

**Norseal** PS-VO Series for H(EV) and automotive sealing is specially designed to provide the following features:

- Flame retardant and halogen free, PS-V0 is tested in accordance to UL94 V-0 in 3.5 mm (0.14 in) thickness
- Excellent compression set resistance
- Airtight; compressed by 30%, PS-V0 is airtight up to a pressure of 10 kPa (1.5 psi)
- Excellent water-sealing properties
- Conformable and soft: will conform to uneven surfaces
- Provided in master roll stock for ease of conversion (usable width max .1360mm × 20m length (53.54 in × 21.87 yd)

## FtC/CFD Values - Norseal PS-VO



#### **APPLICATIONS**

- Protection for H(EV) battery packs
- Automotive sealing





## Norseal PS-VO Series — Properties

Performance tests are run using standard test procedures. The values presented are typical values and should not be used for specification purposes.

Properties	Test Method	Typical Value
PHYSICAL		
Density, kg/m³ (lb/cu.ft.)	ASTM D3574	350 (22)
Thickness, mm (in)		3.5 (0.14)
Typical Force to Compress, kPa (psi) 50 mm/min @ 30% compression	ASTM D1667	90 (13.1)
Typical Compression Force Deflection, kPa (psi) 50 mm/min @ 30% compression	ASTM D1667	70 (10.2)
Tensile Strength, kPa (psi) 500 mm/min	ISO1798	300 (43.5)
Elongation 500 mm/min	ISO1798	45%
Water Absorption (%)	ISO 6916-1	< 10
Compression Set (%) 70% compression @ 70°C (158°F) for 7 days	ASTM D1667	< 10
THERMAL & FLAME		
Flame Resistance	In accordance to UL94	VO
Temperature Resistance, °C (°F)	SAE J-2236 for 1008 hrs. SAE J-2236 for 168 hrs.	90 (194) 121 (250)
ELECTRICAL		
Surface Resistivity, (ohm/sq)	ASTM D257	3.4 × 10 <sup>10</sup>
Volume Resistivity, (ohm.cm)	ASTM D257	8.7 × 10 <sup>10</sup>

### **Shelf Life**

12 months when stored at 21°C (70°F), 50% relative humidity, when product is stored in its original packaging, away from direct sources of heat and sunlight.



#### **Saint-Gobain Tape Solutions**

North America | South America | Europe | Asia For a full list of locations, please visit tapesolutions.saint-gobain.com/contact-us IMPORTANT: It is the user's responsibility to ensure the suitability and safety of Saint-Gobain products for all intended uses and that the materials to be used comply with all applicable regulatory requirements. Saint-Gobain assumes no responsibility for any product failures that occur due to misuse of the materials it provides arising out of the design, fabrication or application of the products into which the materials are incorporated.

WARRANTY: For a period of 6 months, Saint-Gobain warrants this product(s) to be free from defects in manufacturing. The only obligation under any applicable product warranty will be to replace any portion proving defective, or at our option, to refund the purchase price thereof. SAINT-GOBAIN DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Form #1866 | © Saint-Gobain July 2022 | Norseal and Saint-Gobain are trademarks of Saint-Gobain.