



## Aerospace Composites Process Material

**HPPAEROTEC Products:** Are versatile materials for chemically hostile, mechanically severe and thermally extreme composite applications. These unique materials maintain outstanding release characteristics and flexibility over a broad range of operating temperatures in varied processing environments. **HPPAEROTEC** products are typically composed of PTFE coated glass, PTFE films, and Silicone Rubber coated glass. A variety of substrates, thickness, weights and surface textures can be produced in a diversity of styles.

### FABRICS



- PTFE Coated Glass (Armalon)
- Silicone Coated Glass
- Porous / Non-Porous
- Crease & Tear Resistant
- Conductive / Anti-Static
- Beta Cloth
- Silicone Rubber Blankets

### FILMS



- PTFE
- ETFE
- FEP
- Kapton
- Tedlar
- Mylar

### TAPES

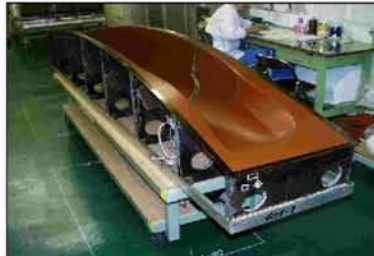


- PTFE Coated Glass
- PTFE Film / Glass
- Skived PTFE Film
- Oriented PTFE Film
- Kapton
- Polyester Flash
- Plasma Spray Tape

**Primary Features:** **HPPAEROTEC** Series of Tapes, Fabrics & Films offer exceptional release properties and superior chemical and electrical characteristics over wide temperature ranges. In addition, these products are dimensionally stable and resistant to distortion under heat and pressure. Conductivity and porosity can be controlled over a broad spectrum.



**PANEL RELEASE SHEETS**  
SP2-10 Series



**TOOLPRO TAPE**  
TP-100S Series



**TOOLPRO TAPE**  
TP-100S Series

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## VACUUM GRADE SILICONE RUBBER BLADDERS & MEMBRANES FOR **AEROSPACE & WOODWORKING**

P/N: HP50VB

Up to 72" Splice Free

73" to 100" with "Invisible Splice"

### **DESCRIPTION:**

This particular specially compounded formulation is produced specifically for the aerospace/ aircraft manufacturing facilities throughout the world. It meets all the stringent requirements of the Federal Procurement Specification known as ZZR-765E class 3B Grade 50. This 50 durometer high strength silicone sheet is produced with a fine textured fabric finish on both sides. This finish is highly sought after because of its ability to very quickly wick out all air during Vacuum Bagging procedures. It has amazing reusability, durability and it also will slide or float over-layed up parts with great ease. This product has extraordinary "Drawdown" strength and resiliency. this makes it's performance remarkable when exposed to the high pressures and elevated temperatures it can encounter in autoclaves during cure cycles of composite structures. In the cured or uncured form it allows the fabricator unparalleled versatility in designing intricate shapes and contours. Another characteristic is it's excellent resistance to weather, ozone, hot water, low pressure steam, alcohols, diethelyene glycol and average resistance to petroleum base oils. However, it is not recommended for service in aromatic solvents, fuels, chlorinated solvents and acids. When speaking of service temperature ranges one can consistently expect -100F to +450F. This high strength silicone sheet is available in both the uncured and cured form in a wide variety of thicknesses. Also, the widths of these sheets are available up to 72" wide without a splice!. The physical properties below are for the most popular high strength silicone sheet.

### **TYPICAL PHYSICAL PROPERTIES:**

Shore (A) Hardness	50 +/-5*
Tensile Strength	1300 psi
Elongation at Break	800 %
Modulus at 300% Elongation	400 psi
Tear Strength	240 psi
Compression Set (22hrs @ 350F)	19%
Available Thickness	.062" to .125"
Surface:	Smooth or Fine Fabric Finish

\* Available Hardness: 40A, 45A, 50A, 55A and 60A



The above values are typical properties and are provided for information only. They should not be used to set specification requirements. It is up to the end user to determine whether the material is suitable for the intended application. Sellers & manufacturers only obligation shall be to replace such quantity of the product found to be defective.