

# SPECIAL FLUOROPOLYMER-Protected ELASTOMERIC Gaskets, Seals, and Blankets

## FOR PROCESSING: Chlorine, Chlorate, Ultra-Pure Chemicals, Heavy Chemicals

The Technology of combining a Special Fluoropolymer to High Quality Elastomers is a benefit in applications with Extreme Corrosive Chemical Conditions and/or high requirements for Ultra-Purity, where either an elastomer with a satisfactory performance doesn't exist, or such elastomers are prohibitively expensive.

For standard custom gasketing and other sealing elastomer-based parts, such as diaphragm blankets, Prince has developed the technology for bonding, encapsulating and enveloping desirable fluoropolymer films to high performance elastomers.

Prince, through years of research and developmental testing, has established the criteria in making this technology practical in regards to:

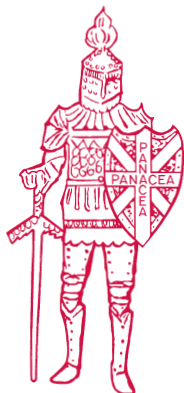
- The cross-sectional shapes that offer the longest life.
- Reliable design of inside corners on seals.
- The thickness of Fluoropolymer Films to eliminate permeation problems.
- Jointless or reliable welded designs with a minimum of welds.
- This technology in most cases is a less expensive alternative than fluoroelastomers.

**THE ELASTOMER** – “Panacea®” 6962 Special EPDM, a world-wide proven material, is used for this technology and variations of this stock can also be used where required. 6962 offers a service range of -40 F° to 300 F°. Other elastomers can be utilized where appropriate.

**THE FLUOROPOLYMER** – “Panacea®” F230LP Special PTFE material is ideal for these applications due to the superior Chemical Resistance of PTFE and Temperature Range of up to 500 F°. The Special F230LP material has increased permeation resistance and toughness compared to standard PTFE. Other Fluoropolymers such as FEP, PFA, PTFE, and F130 can also be utilized where appropriate. The non-contaminating nature of all of these Fluoropolymers make them ideal for ultra-pure applications. Specify: Virgin material when used for ultra-pure applications.

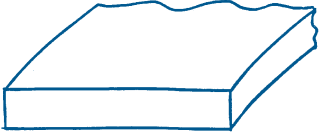

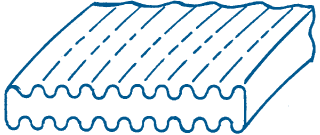






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# Prince Membrane Cell Gaskets For Chlor-Alkali and Other Electrolytic Cells

 DIE-CUT	 MOLDED PLAIN	 MOLDED - EASY TO SEAL
 MOLDED WITH BONDED FLUOROPOLYMER ARMOR - PLAIN	 MOLDED WITH BONDED FLUOROPOLY- MER ARMOR - EASY TO SEAL	 DIE-CUT WITH LOOSE FLUOROPOLYMER ARMOR
 DIE-CUT WITH LOOSE FLUOROPOLYMER ENCAPSULATING ARMOR	 MOLDED WITH REINFORCING	 MOLDED WITH BONDED FLUOROPOLYMER ARMOR AND REINFORCED

**“PANACEA”® 6962** – Special EPDM Peroxide Cured. 6962 is compounded without the use of Calcium or Magnesium.

**“PANACEA”® F230LP** – Fluoroplastic – modified PTFE, Temperature Range <math>-100^{\circ}\text{F}</math> to <math>500^{\circ}\text{F}</math>. Special low permeation formulation. Chemical resistance of PTFE.

Representative Physical Properties			
	ASTM	“Panacea”® Special EPDM	“Panacea”® Special Fluoroplastic
Compound No.	—	6962	F230LP
Hardness-Shore “A”	D2240	60+5	68-70 shore “D”
Tensile, P.S.I.	D412	1800	—
Tensile, P.S.I.	D4894	—	4500
Elongation %	D412	350	—
Elongation %		25%	450-460
Compression set 70 Hrs.-@ 212°F	D395(B)	—	—
Temperature Range	—	<math><- 40^{\circ}\text{F}</math> to <math>300^{\circ}\text{F}</math>	<math><- 180^{\circ}\text{F}</math> to <math>500^{\circ}\text{F}</math>