

Chemical Resistance of **Panacea™** Gasketing Materials



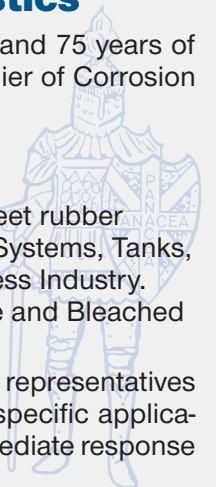
About Prince Rubber & Plastics

Prince Rubber and Plastics offers expertise and 75 years of experience as a recognized worldwide supplier of Corrosion Resistant Rubber and Plastic products.

Our capabilities include:

- Custom Rubber and Plastic products
- Gaskets from molded, extruded and sheet rubber
- Custom fabricated Piping and Ducting Systems, Tanks, and accessories for the Chemical Process Industry.
- Specializing in the Chlor Alkali, Chlorate and Bleached Pulp Industries.

Highly knowledgeable Prince staff and field representatives will help you find the right solution for your specific application. Please call or e-mail us to receive an immediate response for further information.



Chemical Resistance of Panacea® Specialty Gasketing Materials at 70°F, 21°C

Panacea® Gasketing Material

Commonly Used Chemicals

	PT-G PT-101	6962	5170A	TYGON® PP-340 R-3400	1475 TFE-P	PP-363
Acetic Acid	A	A to 20% conc.	B	X	X	X
Black Liquor	A	A	B	A		X
Brine (Sodium Chloride Sol'n.)	A	A	A	A	A	
Chlorine Gas - Dry	A		X	B		
Chlorine Gas - Wet	A	A	X	B		
Chlorine Dioxide Gas in Chilled H ₂ O	A			A		
Hydrochloric Acid - 37% Conc.	A	A	B		A	
Hydrogen	A	A	B		A	
Hydrogen Peroxide 50% - 70% Conc. in H ₂ O	A		X			A
Hypochlorous Acid	A	A		A		
Nitric Acid - 98%	A		X	X	B	
Nitric Acid - 50%	A		X	B	A	
Oxygen (Gas)	A	A	B	A	A	
Phosphoric Acid - 80% Conc.	A	A	X	A		
Potassium Hydroxide	A	A	B	A	A to 30% conc	
Sodium Chlorate Sol'n.	A	A			A	
Sodium Chlorate Cell Liquor w/Sodium Hypochlorite	A	A			A	
Sodium Hydroxide (Caustic Soda) 50% Conc.	A	A	A	A	A	
Sodium Hypochlorite 12%	A	A	X	A	A	
Sulfur Dioxide	A	A	X	X	A to 5% conc.	
Sulfuric Acid - 90%	A	A	X	X	A	
Sulfuric Acid - 93%	A	B	X	X	A	

For use of these materials at higher or lower temperatures, consult with your Prince Rubber & Plastics representative. We have extensive experience with these materials at different temperatures.

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PRP-001

Physical Properties of Materials

Panacea® Material

	MATERIAL DESCRIPTION	AVAILABLE	DUROMETER	TEMP RESISTANCE	TENSILE STRENGTH	ASTM-D395 COMPRESSION SET
PTG-WHITE	Bead reinforced PTFE	1/16", 1/8" thick sheet	53 Shore D	-300°F to 500°F	2200 PSI	14%*
PT-101	Expanded PTFE	<ul style="list-style-type: none"> Molded gasket to 12" 1/16", 1/8" sheet Joint sealant to 2" 	N/A	-400°F to 600°F	1630 PSI	68%*
6962	Special high polymer content blend of Ethylene Propylene with peroxide cure	1/16", 1/8", 3/16", 1/4" Thick sheet and hose	62 Shore A	300°F	1800 PSI	25%
5170A	Specially compounded pure gum with antioxidants	1/8", 3/16", 1/4", sheet + custom tube + hose	40 Shore A	200°F	2700 PSI	35%
TYGON® PP-340 R-3400	Special plasticized vinyl	1/16", 1/8", 3/16", 1/4" in sheet 1/8", 3/16" sheets & tubing avail.	75 Shore A	200°F	2325 PSI	47%
1475-TFE-P	Tetrafluor-ethylene-propylene-copolymer	1/16", 1/8", 3/16", 1/4" sheet	75 Shore A	400°F	2400 PSI	27% (m-compound)
PP-363	Special plasticized vinyl	1/16", 1/8", 3/16", 1/4" in sheet and tubing	50 Shore A	180°F	1580 PSI	45%

A	Resistant to Chemical(s) at 70°, 21°C	X	Not Resistant to Chemical Major Physical Changes In Material Occur Quickly
B	Some Chemical Attack But Attack is Very Slow		No Test Data Available

*Compression to ASTM - F - 36



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