

### PR-1564 potting and molding compound

#### Description

PR-1564 is a low viscosity, medium hardness potting and molding compound. It has a service temperature range from -80°F (-62°C) to 275°F (135°C). This material is designed for applications where extra flexibility and resistance to cold flow are required.

PR-1564 is a two-part, chemically curing polyurethane compound. It cures at room temperature to a flexible cold flow-resistant rubber.

The following tests are in accordance with PRC DeSoto International and MIL-S-8516 specification test methods.

#### Application properties (typical)

Color	
Part A	Light straw or Black
Part B	Colorless
Mixed	Amber or Black

Mixing ratio	Part A:Part B
By weight	7.7:100

Viscosity	
(Brookfield #5 @ 10 rpm), Poise (Pa-s)	90 (9)

Application life to 2500 poise	
(250 Pa-s) @ 75°F (24°C), hours	2

	Tack free time (hours)	Mold release time (hours)	Cure time to 30 A Durometer (hours)
75°F (24°C)	12	—	24
180°F (82°C)	—	1.5	1

#### Performance properties (typical)

Cured 16 hours @ 180°F (82°C) or Cured 168 hours @ 75°F (24°C)	
Cured specific gravity	1.06
Nonvolatile content, %	99
Ultimate cure hardness, Durometer A	65
Volume shrinkage, %	4
Tensile strength, psi (KPa)	1000 (6900)
Ultimate elongation, %	300
Tear strength (Die C), lbs./in.	100
Fungus resistance (MIL-E-5272)	Non-nutrient

Peel strength, pli (N/25 mm)	
Aluminum alloy*	55 (244)
Cadmium plate*	48 (215)
Neoprene**	25 (111)
Polyvinyl chloride***	25 (111)

\*Primed with PR-425 Primer

\*\* Buffed and primed with PR-1523-M Adhesion promoter

\*\*\* Tackified with methyl ethyl ketone (MEK) and primed with PR-1543 Adhesion promoter

Dielectric constant	
1 KHz @ 75°F (24°C)	7.0
1 MHz @ 75°F (24°C)	4.3

Power factor	
1 KHz @ 75°F (24°C)	0.10
1 MHz @ 75°F (24°C)	0.08

Volume resistivity, ohm-cm	
@ 75°F (24°C)	1 X 10 <sup>12</sup>
@ 150°F (66°C)	5 X 10 <sup>9</sup>
@ 250°F (121°C)	4 X 10 <sup>8</sup>

Surface resistivity, ohms	
@75°F (24°C)	3 X 10 <sup>13</sup>
@ 150°F (66°C)	2 X 10 <sup>11</sup>
@ 300°F (121°C)	1 X 10 <sup>10</sup>

Insulation resistance, megohms	
@ 75°F (24°C)	250,000
@ 150°F (66°C)	1,000
@ 250°F (121°C)	100

Dielectric strength, volts/mil	
125 mils	335

Note: The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

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## Surface preparation

Prepare surfaces according to the PR-1500 Series Potting/Molding Application Guide.

## Packaging options

PR-1564 is supplied as a two-part unit or premixed and frozen in Semco® cartridges.

## Mixing instructions

Mix according to the PR-1500 Series Potting/Molding Application Guide.

## Storage life

The storage life of PR-1564 in a two-part unit is at least 12 months when stored at temperatures below 80°F (27°C) in original, unopened containers. The storage life of PR-1564 in premixed and frozen Semco® cartridges is at least 21 days when stored at temperatures below -40°F (-40°C) in original, unopened containers.

## Health precautions

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Material Safety Data Sheet (MSDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An MSDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

**For industrial use only.** Keep away from children.

**For emergency medical information call**  
1-800-228-5635.

**Additional information can be found at:**  
[www.ppgaerospace.com](http://www.ppgaerospace.com)

**For sales and ordering information call**  
1-800-AEROMIX (237-6649).

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