

Gelest® xPDMS 2-Part High Elongation Reprographic Silicone Elastomer (100:1 kit)

Capsular Description: Thickness  thick Cure Pt catalyst Hardness  low Type  100% active 2-part

Description

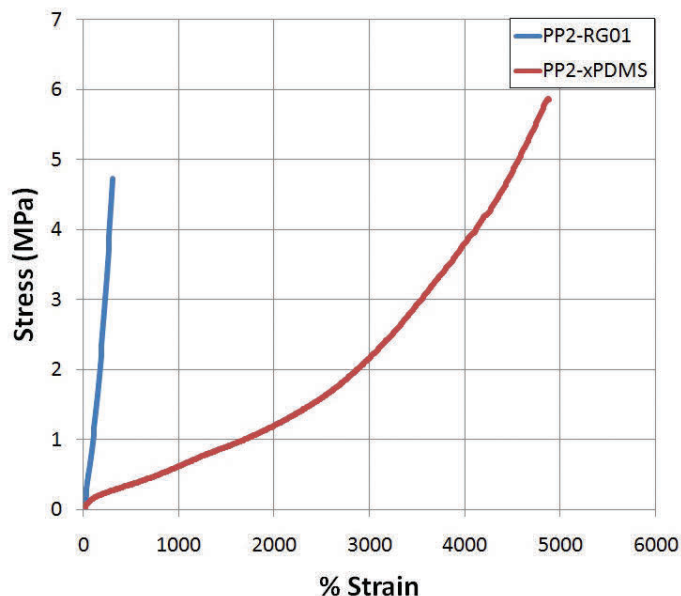
Gelest® xPDMS is a flexible, translucent molding and encapsulation compound with significantly higher elongation than conventional silicones. Gelest® xPDMS also has a greater amount of self-sealing compared to conventional silicone RTVs, allowing for mechanical penetration of cannulae and optical fibers as well as electroactive interconnects.

Cured Properties

Tensile Strength	6.0-7.0 MPa
Elongation	4000-6000%
Durometer, Shore A	10-15
Refractive Index (25°C)	1.41
Volatiles (4 hours/150°C)	≤0.1 wt%
Critical Surface Tension	23-24 mN/m
Specific Gravity	1.12
Contact Angle, water	105-110°
Tear Strength	40.0-42.0 kN/m
Elongation @ Tear	2000%

Uncured Properties of Gelest® xPDMS

Viscosity (100:1) catalyzed:	12,000-14,000 cSt
Part A (base):	12,000-14,000 cSt
Part B (crosslinker):	800-1000 cSt



Application Methods

Thoroughly mix Part A and Part B in a 100:1 ratio. Try to avoid introducing bubbles. For critical applications, de-air mix under vacuum for about 20 minutes. The pot-life is 24 hours at 25°C. Avoid entrapping air during transfer and casting. Cure at 80°C for 4 hours or at room temperature for 36 hours.

Standard Packaging

PP2-RG09 Gelest® xPDMS
 202 g kit (200g RG09-A, 2g RG09-B)
 1.01 kg kit (1000g RG09-A, 10g RG09-B)

Application and Reference Data

- Goff, J. et al. *Polymer Preprints* **2012**, 53(1), 486.
- Goff, J. et al. *Advanced Materials* **2016**, 28(12), 2393-2398.