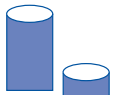
Gelest® RG 04 2-Part Oleophobic Reprographic Silicone Elastomer (10:1 kit)

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

Description

Gelest® RG 04 is a clear to translucent molding and encapsulation compound with greater resistance to swelling by hydrocarbons than conventional silicones, allowing for use of a wider range of solvents for microfluidic applications.

Cured Properties

Tensile Strength	1.5-2.0 MPa
Elongation	150-200%
Durometer, Shore A	25-30
Refractive Index (25°C)	1.39
Specific Gravity	1.36
Contact Angle, water	110°
Contact Angle, hexadecane	45°
Swell (wt%)	
Toluene	**7%**
Heptane	**2%**

Standard Reprographic PDMS Swell (wt%)	
Toluene	90%
Heptane	83%

Uncured Properties of Gelest® RG 04

Viscosity (10:1) catalyzed: 30,000-35,000 cSt
Part A (base): 65,000-70,000 cSt
Part B (crosslinker): 800-1200 cSt

Application Methods

Thoroughly mix Part A with Part B in a 10:1 ratio. (Due to the high viscosity of this system, the mixing step is not as facile as standard PDMS elastomers.) De-air mix under vacuum for about 30 minutes. The pot-life is 6 hours at 25°C. Pot-life may be extended by storing at 5°C. Pour into mold or apply to substrate. Avoid entrapping air. Cure at 80°C for 4 hours or at room temperature for 72 hours.

Standard Packaging

PP2-RG04 Gelest® RG 04
100 g SpeedMixer™ kit
220 g kit (200g RG04-A, 20g RG04-B)
1.1 kg kit (1000g RG04-A, 100g RG04-B)