

Gelest® RG 01 2-Part Reprographic Silicone Elastomer (10:1 kit)

Capsular
Description:

Thickness



thick

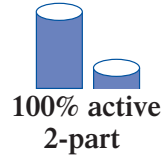
Cure **Pt**
catalyst

Hardness



medium

Type



100% active
2-part

Description

Gelest® RG 01 is a flexible, high definition clear molding and encapsulation compound. The moderate viscosity of the catalyzed mix and long pot-life at room temperature make this extremely versatile for a broad range of applications.

Cured Properties

Tensile Strength	5.5-7.0 MPa
Elongation	80-100%
Durometer, Shore A	45-60
Refractive Index (25°C)	1.43
Volatiles (4 hours/150°C)	1.0 wt%
Coefficient of Friction (aqueous environment, 37°C)	~1.5-2.0
Critical Surface Tension	23-24 mN/m
Tear Strength	1.75-2.60 kN/m
Specific Gravity	1.04
Contact Angle, water	105-110°

Uncured Properties of Gelest® RG 01

Viscosity	(10:1) catalyzed: 3500-4500 cSt
	Part A (base): 5000-5500 cSt
	Part B (crosslinker): 50-75 cSt

Application Methods

Thoroughly mix Part A and Part B in a 10:1 ratio. Try to avoid introducing bubbles. For critical applications, de-air mix under vacuum for about 20 minutes. The pot-life is 12 hours at 25°C. Pot-life may be extended by storing at 5°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-RG01 Gelest® RG 01
- 100 g SpeedMixer™ kit
- 220 g kit (200g RG01-A, 20g RG01-B)
- 1.1 kg kit (1000g RG01-A, 100g RG01-B)

Application and Reference Data

- Inglis, D. et al. *Biomicrofluidics* **2010**, 4, 26504.