

# Gelest® RG 02 2-Part Oleophilic Reprographic Silicone Elastomer (10:1 kit)

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

### **Description**

Gelest<sup>®</sup> RG 02 is a clear to translucent, high definition molding and encapsulation compound with greater adsorption of hydrocarbons than conventional silicones making it able to transfer a wider range of chemicals for self-assembly techniques and micro-contact printing.

#### **Cured Properties**

Tensile Strength

Elongation

Durometer, Shore A

Refractive Index (25°C)

Dielectric Constant

2.0-4.0 MPa
80-100%

1.43

2.6

Critical Surface Tension 27-29 mN/m
Tear Strength 1.75-2.10 kN/m

Specific Gravity 1.04 Contact Angle, water 110-115°

Swell (wt%)

Toluene 130% Heptane 117% Standard Reprographic PDMS Swell (wt%)
Toluene 90%
Heptane 83%

## **Uncured Properties of Gelest® RG 02**

Viscosity (10:1) catalyzed: 3000-4000 cSt

Part A (base): 5000-5500 cSt Part B (crosslinker): 35-75 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. Apply to substrate. Avoid entrapping air during transfer and casting. Cure at 80°C for 4 hours or at room temperature for 36 hours.

### **Standard Packaging**

PP2-RG02 Gelest® RG 02

100 g SpeedMixer™ kit

220 g kit (200g RG02-A, 20g RG02-B)

1.1 kg kit (1000g RG02-A, 100g RG02-B)