

# Silicone Elastomers

Polymer Science, Inc. offers a complete line of silicone elastomer (silicone rubber) products for uses ranging from the medical and electronics industries to the automotive and aerospace industries. Silicone elastomers are very versatile and can be manipulated for a variety of different applications.

## **Attributes of Polymer Science Elastomers**

- Low Haze
- Excellent Clarity
- Chemical Resistant
- High Useful Temperature Range
- Available in Variety of Durometers

## **Polymer Science, Inc. Advantages**

- Lower minimum order quantity
- Customization of width to minimize waste
- Standard and customized construction available
- Short lead times
- Excellent in-house and field technical support
- Eco-friendly facility

## **Physical and Mechanical Properties of Elastomers**

- Tackiness Elastomers will resist sliding on various other materials such as metals, plastics and fibers
- Insulation Elastomers are good insulators of electricity
- Permeability Elastomers tend to resist the passage of waters and fluids, air, gasses and steam
- Tear Resistance
- Abrasion Resistance



#### **Custom Solutions...**

Our design team works quickly to provide the solutions you need, allowing your project to expeditiously move from conception to production. Our diverse team of engineers and technical staff, along with our state-of-the-art equipment provide the capabilities to develop a quality product consistent with your application requirements.



#### **Industries Served**

- Automotive
  - Airbags
  - High Temperature Gaskets
  - Vibration Dampeners
- Industrial / Military (Aerospace)
  - Gaskets for Missiles
  - Film Reinforced Spacers
- Consumer Electronics
  - Biometric Sensors
  - Waterproof / Dust Proof Cases
  - Lens and Camera Covers
    - Optically Clear Elastomer
- Medical and Cosmeceutical
  - Scar Therapy
  - Sleep Apnea Gasket / Valve

# **Capabilities for our Silicone Elastomers**

- Sheet or Roll Form
- With or Without Adhesive
- Textured or Gloss Finish Options
- Polycarbonate and Polyester Liner Options Available
- Customizable Options
  - Color Width

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- Tensile
- Elongatio
- Elongation

# **Characteristics of our Silicone Elastomers**

- Durometer Shore A 8-80
- Up to 762mm Usable Width
- ± 3μ Precision Calendering
- Thickness Ranges from 25µ 7mm
- Quick Turnaround on Prototypes
- Flexible MOQ
- Competitive Cost
- 6-8 Week Lead Time (based upon application requirements)

