#### **Technical Data Sheet**



# LIM™ 6010

## Description

LIM6010 liquid silicone rubber is a two-component product formulated for use in liquid injection molding to produce elastomeric parts where low-durometer is a key requirement. LIM6010 elastomer is clear, but easily pigmentable with Momentive masterbatch colors. The combination of low-durometer and non-tackiness allows the product to be used in such consumer goods applications as corn pads and heel inserts, where 'soft touch' sensory characteristics are important. LIM6010 elastomer offers a convenient 1:1 mix ratio and releases easily from molds. Cure time is rapid, generally 10 to 40 seconds at 150°C (302°F) - 204°C (400°F), depending on part size, configuration, and molding temperature.

# **Key Features and Benefits**

- Low-Durometer
- Non-Tackiness
- Sensory Characteristics (Added Cushioning)
- Rapid molding cycle times > 20-60 seconds
- Convenient 1:1 Mix Ratio
- Outstanding Thermal Cycling Performance

# **Typical Physical Properties**

| <u>Uncured Properties</u> | LIM6010-A | <u>LIM6010-B</u> |
|---------------------------|-----------|------------------|
| Appearance                | Clear     | Clear            |
| Specific Gravity          | 1.05      | 1.05             |

| Viscosity (cps) | 30,000 | 30,000 |
|-----------------|--------|--------|
| 2 \ 1 /         | ,      | ,      |

| Cured Properties (75 mils thick)    | As Molded 30 secs @ 177°C<br>/350°F | Postbaked 1 hr @ 177°C / 350°F |
|-------------------------------------|-------------------------------------|--------------------------------|
| Hardness, Shore A  Durometer        | 10                                  | 15                             |
| Tensile Strength, psi (MPa)         | 400 (2.76)                          | 450 (3.10)                     |
| Elongation, %                       | 510                                 | 440                            |
| Tensile Modulus, 100%, psi<br>(MPa) | 36 (0.25)                           | 55 (0.38)                      |
| Tear Strength, Die B, lb/in (KN/M)  | 32 (32.5.62)                        | 60 (10.51)                     |

Typical product data values should not be used as specifications.

Assistance and specifications are available by contacting Momentive Performance Materials.

# **Potential Applications**

The combination of low-durometer and non-tackiness allows the product to be used in such consumer goods applications, where 'soft touch' sensory characteristics are important.

- Corn Pads
- Heel Inserts

# **Processing Recommendations**

Ready-to-use mixtures (of the components A and B) are fed directly to the injection-molding machine from the original containers by means of a metering and mixing unit. The mixture, consisting of the two components in the ratio 1:1, is injected into the heated mold. At mold temperatures of 170 - 230°C, the addition-crosslinking silicone rubber typically vulcanizes, without any dissociation products, within a few seconds. High curing speed and easy demolding can help enable fully automated production of a large number of articles in short cycle times.

## **Regulatory Compliance**

- A representative sample of an analogous product to LIM 6010 met the requirements of USP Class VI and ISO 10993 under Good Laboratory Practices (GLP).
- Listed as UL 94 HB (File No. E205753)
- The ingredients are listed in the BfR recommendation XV "Silicones" (1)
- Compositionally compliant with 21 CFR 177.2600 Rubber articles intended for repeated use<sup>(2)</sup>
- (1) Producer of the final article needs to test and confirm that the final product meets the extraction limits of BfR XV or corresponding EU legislation.
- (2) It is the responsibility of the user to determine that the final product complies with the extractive limitations and other requirements of 21 CFR 177.2600, under their specific manufacturing procedures.

### **Patent Status**

Standard copy to come

## **Product Safety, Handling and Storage**

Standard copy to come

## Limitations

Standard copy to come

#### **Contact Information**

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For literature and technical assistance, visit our website at: www.momentive.com

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