

**Technical Data Sheet** 

# LIM™ 6041

# Description

LIM6041 liquid silicone rubber is a 2 component Radio - Opaque product formulated with Barium Sulfate. It is used in liquid injection molding of high performance elastomeric parts. The combination of excellent tear strength and very high tensile strength makes this product suitable for a wide variety of applications in medical devices where molded parts can be detected under X-ray due it's radio opacity.

# **Key Features and Benefits**

- Barium Sulfate filled for excellent radio opacity
- Excellent tear strength
- Convenient 1:1 mix ratio for use with automatic equipment
- Rapid cure time: 10 to 40 seconds depending upon part size, configuration, and molding temperature
- Wide range of molding temperatures: 1500C (3020F) to 2050C (4000F)
- Excellent release from metal molds

# **Typical Physical Properties**

Property	LIM 6041	
Color	White	
Specific Gravity	1.19	

Properties	Mixed A & B	
Cure rate (Monsanto Rheometer - MDR2000) @ 177°C (350°F)		
Torque, max., in-lbs.	13.50	
T-02 seconds	7	
Peak rate, in./lb/min.	101	
T-90, seconds	16	
Cured Properties	<u>As Molded 30 sec / 177°C</u> (350°F)	
Hardness, Shore A durometer	44	
Tensile Strength, psi (MPa)	1032 (7.14)	
Tear Strength, ppi (KN/M)	193 (33.9)	

Typical product data values should not be used as specifications. Assistance and specifications are available by contacting Momentive.

### **Potential Applications**

The combination of excellent tear strength and radio - opacity, it is suitable for applications in medical devices such as wound drain catheters, where molded parts can be detected under X-ray.

# **Processing Recommendations**

Ready-to-use mixtures (of the components A and B) are fed directly to the injectionmolding 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 Silopren LIM6041 met the requirements of USP Class VI.

• 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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