NuSil MED-4901

Silicone Rubber, LSR NuSil Technology

Message:

NuSil Technology's restricted materials may be considered for use in short-term implant applications, 29 days or less, or for external applications. Liquid silicone rubbers, or LSRs, are elastomer systems reinforced with silica. They contain functional polymers of lower average molecular weight and viscosity when compared to high consistency rubbers (HCRs). They are typically supplied as two-component systems and formulated in a 1:1 mix ratio. Because their consistency is akin to petroleum jelly, they are often pumped with injection molding equipment to form molded components such as o-rings, gaskets, valves, seals, and other precision molded parts.

LSRs are designed for liquid injection molding (LIM) processes which may utilize single or multi-cavity molds, or for overmolding processes. Originally designed for automated systems, they are developed with high volume applications in mind and benefit from their high strength.

Comments: LOW DUROMETER LSR

Forms Liquid Processing Method Liquid Injection Molding (LIM) Mechanical Nominal Value Unit Tensile Strength (300% Strain) 0.103 MPa Thermoset Nominal Value Unit Thermoset Components Part A Mix Ratio by Weight: 1.0 Part B Mix Ratio by Weight: 1.0 Additional Information Nominal Value Unit Cure System Platinum Extrusion Rate 160 g/min Unoured Properties Nominal Value Unit Density 1.09 g/cm³ Cure System 1.09 g/cm³ Cure System 1.09 g/cm³ Cure System 1.09 g/cm³	General Information			
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Density 1.09 g/cm³ Curing Time (150°C) 0.083 hr	Extrusion Rate	160	g/min	
Curing Time (150°C) 0.083 hr	Uncured Properties	Nominal Value	Unit	
· · · · · · · · · · · · · · · · · · ·	Density	1.09	g/cm³	
D. H.Y. (2000)	Curing Time (150°C)	0.083	hr	
POT LITE (25°C) /80 min	Pot Life (25°C)	780	min	

Cured Properties	Nominal Value	Unit
Shore Hardness (Shore OO)	40	
Tensile Strength	2.17	MPa
Tensile Elongation at Break	1100	%
Tear Strength	10.5	kN/m

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