Silopren® LSR 3696/25

Silicone Rubber, LSR

Momentive Performance Materials Inc.

Message:

Silopren LSR 3696/25 liquid silicone rubber is a two-component liquid silicone rubber for injection moulding processes. This material is an excellent candidate to consider for the manufacture of elastomeric articles requiring self-lubricating properties. The self-lubricating effect is achieved by a fluid which exudes out of the vulcanizate over an extended period of time. It typically starts between a few hours and one day after vulcanization. Silopren LSR 3696/25 liquid silicone rubber shows an excellent compression set after vulcanization without post-curing.

Key Features and Benefits

Vulcanizates consisting of Silopren LSR 3696/25 liquid silicone rubber are typically distinguished by the following properties:

ultra-low compression set without post-cure

self-lubricating properties

low viscosity

fast cure

low modulus

high thermal stability

increased crack resistance

outstanding resistance to aging

easy to color

Potential Applications

Because of the outstanding properties, Silopren LSR 3696/25 liquid silicone rubber is an excellent candidate to consider for use in wire harness applications for the following elastomeric articles:

cable seals

mat seals

grommets

gaskets

plug seals

General Information				
Features	Fast Cure			
	Fast Molding Cycle			
	Good Colorability			
	Good Mold Release			
	Good Thermal Stability			
	Low Compression Set			
	Low Viscosity			
	Self Lubricating			
Uses	Gaskets			
	Grommets			
	Seals			
Forms	Liquid			
Processing Method	Injection Molding			
Physical	Nominal Value	Unit	Test Method	
Density	1.08	g/cm³	DIN 53479	
Hardness	Nominal Value	Unit	Test Method	

Eigen Series Vinit Test Method 1004 Strain 0.300 MPa 1006 Strain 0.500 MPa 2006 Strain 1.00 MPa 300% Strain 1.50 MPa 300% Strain 6.50 MPa DN 53504 Tensile Bongation (Break) 710 % DN 53504 Tensile Bongation (Break) 19 % ISO 815 Tensile Fongation (Break) 10 White ISO 815 Part A Mix Ratio by Weight 1.0 Inch Test Method Volume (Carry) 7 7 A 60 Inch Inch Inch Inch </th <th>Durometer Hardness (Shore A)</th> <th>24</th> <th></th> <th>DIN 53505</th>	Durometer Hardness (Shore A)	24		DIN 53505
50% Strain 0.300 MPa 100% Strain 0.500 MPa 100% Strain 1.00 MPa 1.50 MPa	Elastomers	Nominal Value	Unit	Test Method
100% Strain 0.500 MPa 200% Strain 1.00 MPa 300% Strain 1.50 MPa Tensile Elongation (Break) 7.10 MPa DIN 53504 Tensile Elongation (Break) 7.10 N/m ASTM D624 Compression Set (175°C, 22 hr) 19 % ISO 815 Thermoset Nominal Value Unit Test Method Thermoset Components W SSTELLIFE (12 27°C) 77 v/k Additional Information Mix Ratio by Weight: 1.0 SSTELLIFE (12 27°C) 77 v/k Additional Information Nominal Value Unit Test Method Vulcanization (175°C) 10.0 min Test Method Policotent	Tensile Stress			DIN 53504
200% Strain 1.00 MPa 300% Strain 1.50 MPa Tensile Strength 6.50 MPa DIN 53504 Tensile Elongation (Break) 710 % DIN 53504 Tear Strength 12.0 MN/m ASTM D624 Compression Set (175°C, 22 hr) 19 % ISO 815 Thermoset Nominal Value Unit Test Method Part A Mix Ratio by Weight 1.0 Test Method Part B Mix Ratio by Weight 1.0 Test Method Additional Information Nominal Value Unit Test Method Additional Information Nominal Value Unit Test Method Public Content ** ** ** Uncured Properties 6.0 % ** Uncured Properties Nominal Value Unit Test Method Color ** ** ** ***O*** ** ** ** Uncured Properties Yon ** ** **20°C**	50% Strain	0.300	МРа	
300% Strain 1.50 MPa Din Saso4 Tensile Strength 6.50 MPa Din Saso4 Tensile Strength 1 120 kN/m ASTM D624 Compression Set (175°C, 22 hr) 19 % ISO 815 Thermoset Mominal Value Unit Test Method Thermoset Components Fart A Mis Ratio by Weight: 1.0 ** ** Part B Mis Ratio by Weight: 1.0 ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **	100% Strain	0.500	МРа	
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Compression Set (175°C, 22 hr) 19 % ISO 815 Thermoset Nominal Value Unit Test Method Thermoset Components Fart A Mix Ratio by Weight: 1.0 Image: Components Image: Componen	Tensile Elongation (Break)	710	%	DIN 53504
Thermoset Nominal Value Unit Test Method Thermoset Components Mix Ratio by Weight: 1.0 Part B Mix Ratio by Weight: 1.0 Shelf Life (< 27°C)	Tear Strength ¹	12.0	kN/m	ASTM D624
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Part B Mix Ratio by Weight: 1.0 Shelf Life (< 27°C) 77 wk Additional Information Nominal Value Unit Test Method Vulcanization (175°C) 10.0 min Fluid Content 2 6.0 % Uncured Properties Nominal Value Unit Test Method Color ** ** 4 White ** ** 2°-5 White ** ** 2°°-6 270 Pa-s ** 2°°-7 300 Pa-s ** Pot Life (20°C) 4300 min ** NOTE 1. Die B ** ** 2. Part B ** ** 3. Part B ** ** 4. Part B ** ** 5. Part B ** ** 6. Part B ** ** 8. Part B	Thermoset Components			
Shelf Life (< 27°C) 77 wk Additional Information Nominal Value Unit Test Method Vulcanization (175°C) 10.0 min Fluid Content 2 6.0 % 3 6.0 % Uncured Properties Nominal Value Unit Test Method Color	Part A	Mix Ratio by Weight: 1.0		
Additional Information Nominal Value Unit Test Method Vulcanization (175°C) 10.0 min Fluid Content 2 6.0 % 3 6.0 % Uncured Properties Nominal Value Unit Test Method Color 4 White White White Viscosity DIN 53018 20°C 6 270 Pa·s Pa·s 20°C 7 300 Pa·s Part Life (20°C) 4300 min NOTE 1. Die B Part B Part B Part A 4. Part B	Part B	Mix Ratio by Weight: 1.0		
Vulcanization (175°C) 10.0 min	Shelf Life (< 27°C)	77	wk	
Fluid Content	Additional Information	Nominal Value	Unit	Test Method
	Vulcanization (175°C)	10.0	min	
3 6.0 % Uncured Properties Nominal Value Unit Test Method Color 4 White 5 White Viscosity In Immates In Imm	Fluid Content			
Uncured Properties Nominal Value Unit Test Method Color 4 White 5 White 5 DIN 53018 5 DIN 53018 5 DIN 53018 6 20°C 6 270 Pa·s 6 7 7 Pa·s 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 <	²	6.0	%	
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4 White 5 White Viscosity DIN 53018 20°C 6 270 Pa·s 20°C 7 300 Pa·s Pot Life (20°C) 4300 min NOTE 1. Die B 2. Part B 3. Part A 4. Part B 5. Part A 6. Part A	Uncured Properties	Nominal Value	Unit	Test Method
Fine Colspan="3">Fine	Color			
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20°C 6 270 Pa·s 20°C 7 300 Pa·s Pot Life (20°C) 4300 min NOTE 1. Die B 2. Part B 3. Part A 4. Part B 5. Part A 6. Part A	⁵	White		
20°C 7 300 Pars Pot Life (20°C) 4300 min NOTE 1. Die B	Viscosity			DIN 53018
Pot Life (20°C) 4300 min NOTE 1. Die B 2. Part B 3. Part A 4. Part B 5. Part A 6. Part A	20°C ⁶	270	Pa·s	
NOTE 1. Die B 2. Part B 3. Part A 4. Part B 5. Part A 6. Part A	20°C ⁷	300	Pa·s	
1. Die B 2. Part B 3. Part A 4. Part B 5. Part A 6. Part A	Pot Life (20°C)	4300	min	
2. Part B 3. Part A 4. Part B 5. Part A 6. Part A	NOTE			
3. Part A 4. Part B 5. Part A 6. Part A	1.	Die B		
4. Part B 5. Part A 6. Part A	2.	Part B		
5. Part A 6. Part A	3.	Part A		
6. Part A	4.	Part B		
	5.	Part A		
7. Part B	6.	Part A		
	7.	Part B		

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