

Technical Data Sheet

SILASTIC™ 7595-40 LSR Kit

40 Durometer, two-part, 1-to-1 mix, translucent, injection molding grade liquid silicone rubber

Features & Benefits

- Fast heat cure, low shrinkage, no cure by-products
- Easily pigmentable
- Formulated to meet FDA 21 CFR 177.2600
- Excellent electrical insulating properties

Applications

- General molding
- Electrical/electronic boots
- Sleeving

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

ASTM1	Property	Unit	Result	
	As Supplied			
	Solids Content	%	100	
CTM 0364	Extrusion Rate	g/min ²	192	
D 4287	Viscosity (Y=0.9s ⁻¹)	Pa.s	2800	
D 4287	Viscosity (Y=10s ⁻¹)	Pa.s	260	
D792	Specific Gravity		1.12	
			As Molded	Post-Cured
D2240	Hardness	Shore A	42	44
D412 DIE C	Tensile Strength	MPa (psi)	10.0 (1460)	9.0 (1300)
D412 DIE C	Elongation at Break	%	610	460
D412 DIE C	Modulus 100%	MPa (psi)	1.0 (150)	1.4 (200)
D624 DIE B	Tear Strength	kN/m (ppi)	34 (190)	34 (190)
D 395 Method B	Compression Set 22 h at 177°C (350°F)	%	47	14
D 2632	Bashore Resilience		60	58
CTM 0157	Circle Shrink	%	2.4	3.24

ASTM: American Society for Testing and Materials
Materials were tested to Dow Corporate Test Methods (CTM), which in most cases are similar to the ASTM standard
listed above. Copies of CTMs are available on request.

Properties obtained on 1.9 mm (0.075 in.) thick slabs. Press cured 5 minutes at 150°C (300°F). Post cured 4 hours at 200°C (392°F).

^{2. 6.2} Bar (90psi), 3.2 mm (1/8 inch) orifice.

Typical Properties (Cont.)

ASTM	Property	Unit	Result	
	Heat Aged 70 h at 225°C (437°F)			
D 2240	Hardness	Shore A	46	
D412 DIE C	Tensile Strength	MPa (psi)	5.8 (840)	
D412 DIE C	Elongation at Break	%	250	
D412 DIE C	Modulus 100%	MPa (psi)	1.9 (280)	
D624 DIE B	Tear Strength	kN/m (ppi)	19 (110)	
	Oil Aged 70 h at 150°C (302°F)		ASTM#1 Oil	IRM#903 Oil
D2240	Hardness	Shore A	37	25
D412 DIE C	Tensile Strength	MPa (psi)	8.3 (1200)	4.4 (630)
D412 DIE C	Elongation at Break	%	420	240
D412 DIE C	Modulus 100%	MPa (psi)	1.3 (190)	1.4 (200)
D624 DIE B	Tear Strength	kN/m (ppi)	27 (156)	12 (67)
D471-79	Volume Change	%	5.3	49
	Electrical Properties		As Molded	70 h at 100°C (212°F) in Water
D149	Dielectric Strength	kV/mm (volts/mil)	19.8 (510)	18.6 (480)
D150	Dielectric Constant	at 100 Hz	2.87	2.93
D150	Dielectric Constant	at 10,000 Hz	2.86	2.92
D257	Volume Resistivity	Ohm.cm x 10 ¹⁴	6.1	7.6
D150	Dissipation Factor	at 100 Hz	0.0016	0.0007
D150	Dissipation Factor	at 10,000 Hz	0.0011	0.0005

How to Use

Mixing and De-Airing

The A and B components are supplied strained and de-aired to be used as lot matched kits. Mix parts A and B in a 1:1 ratio. Meter mix equipment which pumps, meters and mixes the two components without the incorporation of air is strongly recommended for production. If air bubbles are entrapped during mixing the mixture must be thoroughly de-gassed under vacuum.

Pot Life

After the A and B components are mixed, the mixture will remain usable for more than 24 hours at room temperature.

Cleaning

The uncured silicone can readily be removed by most hydrocarbon solvents. Polar solvents, such as ketones and alcohols, are not suitable.

Curing

SILASTIC™ 7595-40 LSR Kit cures rapidly at elevated temperatures. A 2 mm cross-section requires 8–14 seconds at 200°C (392°F). The cure time depends on the thickness and the cure temperature used. Cure can be inhibited by contact with certain materials such as amines, sulphur and tin complexes.

How to Use (Cont.)

Pigmentation

This is normally carried out during mixing and dispensing of the two components. SILASTIC™ Liquid Color Masterbatches are recommended with normal additions of 0.5 to 4% based on total volume.

Food Contact

This product has been formulated to meet applicable food contact regulations and recommendations (for example: FDA 21.CFR 177.2600). For further details on the suitability of this product for food contact applications, please refer to the Food Regulatory Profile. This information is available from your local customer service center.

Post cure is recommended to ensure that food contact requirements are met.

Note: It remains the manufacturers' responsibility to test the final product.

Handling **Precautions**

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life and Storage

When stored at or below 32°C (90°F) in the original, unopened containers this product has a usable life of 18 months from the date of production.

Packaging Information

This product is supplied in lot matched kits: in pail kits of 80 lb/36.2 kg (40 lbs each of parts A and B) and in drum kits of 900 lb/409 kg (450 lbs each of parts A and B).

Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

Health and Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, dow.com or consult your local Dow representative.

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