Technical Data Sheet

Silopren™ Electro 641

Liquid Silicone Rubber

Description

Silopren Electro 641 is a two-component liquid silicone rubber for injection molding processes. Silopren Electro 641 is particularly developed for the manufacturing of cold shrink cable joints and terminations. It can also be used for the manufacturing of housing and weather sheds for many insulators.

Key Features and Typical Benefits

- Very good mechanical properties
- Excellent dielectric behavior over a wide range of temperatures
- Very good tracking and arc resistance
- Advanced ageing behavior and weather resistance
- Fast hydrophobicity transfer and hydrophobicity recovery
- Rapid vulcanization
- Very good tracking and arc resistance
- High stability and flexibility at low temperatures
- Excellent stability to ozone and ultraviolet light
- Not readily combustible, does not melt or drip
- Easy to pigment with LSR Color Pastes

Potential Applications

- cable connectors, fittings and terminals
- suspension and long rod insulators
- post line and pin insulators
- surge arresters

*Silopren™ is a trademark of Momentive Performance Materials Inc.

- hollow core insulators
- high voltage plugs

Typical Physical Properties

Typical properties of the rubber:			
		A-component	B-component
Color		Translucent	Translucent
Viscosity, Pa·s equation	DIN 53019-1	300	250
Flash point according DIN 53 505 [°C] approx. 77			
The pot-life of the mixture of the two components (closed vessel) at 20°C is three days. Increased temperatures reduce the pot-life.			

Typical properties of the vulcanized rubber: Mixing ratio of components A:B = 1:1. Vulcanization: 10 minutes / 175°C			
Density	DIN 53 479 A	g/cm^3	1.11
Hardness	DIN 53 505	duro	39
Tensile strength	DIN 53 504 S2	N/mm^2	12
Elongation at break	DIN 53 504 S2	%	800
Tear strength	ASTM D 624 die B	N/mm	26
Volume resistivity	DIN 53482	Ω·cm	5·10^{15}
Dielectric strength	DIN 53481	kV/mm	25
Dielectric constant	DIN 53483 (50 Hz)		2.8
Tracking resistance	IEC 60587	Class	1A 4.5

Typical physical properties are average data and are not to be used as or to develop specifications.

Processing Recommendations

Ready-to-use mixtures (of the components A and B) are fed directly to the injection-moulding machine from the original containers by means of a metering and mixing unit.

*Silopren™ is a trademark of Momentive Performance Materials Inc.

The mixture, consisting of the two components in the ratio 1:1, is injected into the heated mould. At mould temperatures of 100 - 130°C, the addition-crosslinking silicone rubber vulcanizes free of dissociation products within a few minutes. High curing speed and easy demoulding permit the production of large numbers of articles in short cycle times.

Packaging
Silopren Electro 641 LSR is available in 2 x 20 kg pail-kits and 2 x 200 kg drum-kits.

Patent Status
Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage
Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Limitations
Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

Contact Information

*Silopren™ is a trademark of Momentive Performance Materials Inc.

Email
commercial.services@momentive.com

Telephone

Americas	**Latin America**	**EMEAI- Europe, Middle East, Africa & India**	**ASIA PACIFIC**
+1 800 295 2392 Toll free* +704 805 6946 Direct Number	**Brazil** +55 11 4534 9650 Direct Number	**Europe** +390510924300 Direct number	**China** 800 820 0202 Toll free +86 21 3860 4892 Direct number
*All American countries	**Mexico** +52 55 2169 7670 Direct Number	**India, Middle East & Africa** + 91 44 71212207 Direct number* ***All Middle Eastern countries, Africa, India,**	**Japan** +81 3 5544 3111 Direct number **Korea** +82 2 6201 4600

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

DISCLAIMER:

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY "SUPPLIER"), ARE SOLD SUBJECT TO SUPPLIER'S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER'S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE

*Silopren™ is a trademark of Momentive Performance Materials Inc.

FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Supplier's materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier's products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier's standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

*Silopren™ is a trademark of Momentive Performance Materials Inc.

The use of the "™" symbol designates registered or unregistered trademarks of Momentive Performance Materials Inc. or its affiliated companies. Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.