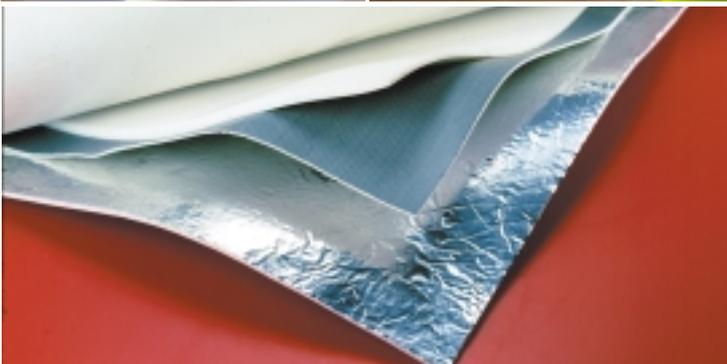


SILASTIC[®] HCR FROM DOW CORNING
fabrication flexibility
PROFIT THROUGH PERFORMANCE

Silastic[®]
Silicone Rubber
Bases
Selection Guide



DOW CORNING



AV03251

High performance elastomers

Specifying the right materials for high-performance elastomer applications can be a real challenge. New designs and tougher service environments, as well as higher expectations for greater efficiency and faster turnaround, all play a part in material selection.

W



AV04629

With more than 55 years' experience in silicone technology, Dow Corning understands customer needs and application requirements like no other supplier. And we offer a complete line of high-consistency silicone rubber bases for a wide range of uses, as well as an extensive array of modifiers and pigment masterbatches.

If you have any doubts about elastomer performance in a new or existing application, contact us for information on *Silastic*[®] brand silicone rubber.

Silastic silicone rubber tackles the jobs conventional elastomers can't

Silastic silicone rubber from Dow Corning is noted for its ability to function under conditions that would damage many conventional materials. When fully compounded and cured, silicone rubber typically offers thermal stability from -50°C to 200°C, and is unaffected by extreme weather conditions, ultraviolet radiation, ozone and many fluids. It also delivers outstanding electrical insulating properties.

Silastic silicone rubber can be found in a myriad of applications on automobiles, aircraft, home appliances, computers, industrial equipment and beyond.

- Seals
- Wire & cable insulation
- Gaskets
- Hoses/ducting
- O-rings
- Tubing
- Connectors
- Rollers
- Fabric coatings
- Keypads
- High voltage insulators
- Profiles

Select from a wide range of physical properties

Silicone rubber bases contain silicone polymer in combination with reinforcing silica fillers.

- **General Purpose (GP):** formulated with a well-balanced combination of tear resistance and compression set, usable for extrusion, molding or calendaring in a hardness range from 20 to 80 Shore A
- **High Strength (HS):** formulated to deliver a combination of high tensile strength and high tear strength.
- **Tough Rubber (TR):** provide a combination of high tensile strength, very high tear strength and high modulus.
- **Low Compression Set (LCS):** specially developed for low compression set (typically 10-16 percent) when vinyl-grade peroxides are used.
- **Low Temperature (LT):** offer a brittle point as low as -116°C.
- **No Post Cure (NPC):** low compression set without post curing.
- **Wire & Cable (WC):** combine excellent extrusion properties with electrical insulating performance.
- **Semi-Conductive:** contain carbon fillers to increase electrical conductivity.
- **High Green Strength (HGS):** high plasticity of the uncured rubber for easier calendaring and profile extrusion.



AV04627

Contact our local sales or technical service experts to discuss your needs.



AV03636

Processing couldn't be easier

Silastic silicone rubber bases are supplied as millable materials that are peroxide-cured with heat. They offer outstanding versatility:

- **Molding:** a wide variety of part shapes and sizes can be compression-, transfer- or injection-molded.
- **Extrusion:** efficient production of tubing, hose, rods, seals, wire insulation and jacketing.
- **Calendering:** selected bases can be calendered into long, thin sheets of uniform thickness, either unsupported or fabric reinforced.
- **Dispersion coating:** bases and compounds can be dispersed in solvents to coat a variety of fabrics or other substrates. Heat cure follows solvent removal.

Compounding

The final rubber compound usually contains one or more of the bases described in this brochure, in combination with additives, extending fillers, pigments and catalysts. We offer several additives and a wide range of pigment masterbatches to make compounding easier.

- Additives from Dow Corning include:
 - Heat stabilizers
 - Flame retardants
 - Viscosity modifiers
 - Handling aids
 - Internal mold release agents
- Pigment masterbatches help customers achieve virtually any color. Translucent to off-white bases are mixed with paste pigments instead of powders for easy and efficient coloring.
- Silicone rubber bases are normally vulcanized using peroxide catalysts. These catalysts are available from several sources. Final rubber properties vary depending on the catalyst used.

Total Global Capabilities with Local Service Support

When you team up with Dow Corning, you receive nothing short of total support, the way you want it. Whether you need advice on how to use our bases, or want us to compound for you, we are here to assist you. We are also always ready to assist in selecting a material just right for your application and processing conditions. We offer you seamless, global capabilities delivered to meet your local needs. Technical support and customer service are available around the globe, including testing and certification to help meet industry or customer requirements.

With more than 50 years of silicone experience, the technology base at Dow Corning includes 1500 active US patents, more than 5000 product formulations and a global silicone R&D database, as well as extensive analytical equipment and capabilities. In short, we deliver the highest quality materials coupled with the global collective knowledge of silicone rubber experts worldwide to meet your company's needs.

**Product specs? — Read on.
Questions? — Give us a call.**

Enclosed in this brochure you will find our *Silastic* silicone rubber bases product selection guide, with product information on *Silastic* silicone rubbers from Dow Corning that meet performance requirements for a wide range of applications. If there is something you need that is not represented here, give us a call. Chances are we are already working on it, or can modify an existing formulation to satisfy your application needs.

For more information on the benefits of *Silastic* silicone rubber, call your nearest Dow Corning representative, or visit us on the Web at www.dowcorning.com. Technical brochures and product data sheets are available on the complete base product line.

**It comes down to having the
silicone rubber materials
and technical support that
customers need**

Dow Corning offers your company a broad selection of silicone rubber bases that can be blended with many different fillers, modifiers, pigments and vulcanizing agents to develop specific compounds. Or we can custom compound a material designed to help shorten development time and optimize manufacturing processes. The most important thing we offer our customers is responsiveness to your global needs, and the ability to provide you with the most comprehensive silicone rubber expertise available anywhere.

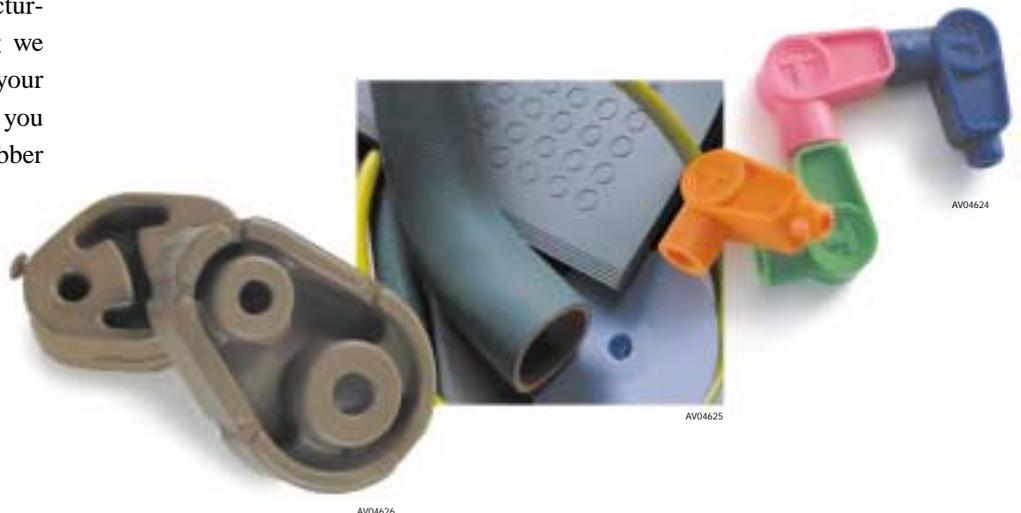
This selector guide is one of three that cover Dow Corning's full line of silicone rubber products. Feel free to request the other two:

• ***Silastic* Fluorosilicone Rubber**

Covers materials uniquely suited for contact with jet and automotive fuels, engine oils and most solvents. Request form no. 45-1005-01 for information on our product line.

• ***Silastic* Liquid Silicone Rubber**

Materials offering advantages of flowable handling during mixing and fabrication, including time-saving automatic metering, intricate mold design capabilities and quick cure. Request form no. 45-1006-01 for information on our *Silastic* liquid silicone rubbers.



Find out more about Silastic Silicone Rubber Bases

www.dowcorning.com

More information on our family of *Silastic* silicone rubber bases is available online at www.dowcorning.com. Find out about product applications, processing methods and the latest industry news – all from your desktop.



AV04623

Americas

United States

Corporate Headquarters
Dow Corning Corporation
P.O. Box 994
Midland, Michigan 48686-0994
USA
Tel: +1 800 248 2481
Fax: +1 989 496 6974

Canada and Mexico

Tel: +1 989 496 6000

Brasil

South American Region Headquarters
Dow Corning do Brasil Ltda
Rua Francisco Tramontano, 100
8 Andar
São Paulo 5686-902
Brasil
Tel: +55 11 3759-4300
Fax: +55 11 3758-5727

Asia

Japan

Dow Corning Asia Ltd.
8th Floor, AIG Building
1-1-3, Marunouchi, Chiyoda-ku
Tokyo 100-0005
Japan
Tel: +81-3-3287-1141

People's Republic of China

Dow Corning China Limited
Shanghai Representative Office
Suite 709, Shanghai Dynasty Business Centre
No. 457, Wu Lu Mu Qi Bei Lu
Shanghai 200040
People's Republic of China
Tel: +86-21-6249-2316
Fax: +86-21-6249-2317

Hong Kong

Dow Corning Asia
19th Floor, East Point Centre
555 Hennessy Road
Causeway Bay
Hong Kong
Tel: +852-2835-0350
Fax: +852-2836-6650

Europe

France

Dow Corning France S.A.
Le Britannia
20, Boulevard Eugène Deruelle
69432 Lyon Cedex 3
France
Tel: +33 (0) 4 72 84 13 60
Fax: +33 (0) 4 72 84 13 79

Germany

Customer Service Center – Central Europe
Dow Corning GmbH
Rheingaustraße 34
65201 Wiesbaden
Germany
Tel: +49 (0) 611 237 1
Fax: +49 (0) 611 237 610

Italy

Dow Corning S.p.A.
Via Lombardia, 31/33
20098 – Sesto Ulteriano
Milano
Italy
Tel: +39 02 98 832 1
Fax: +39 02 98 807 10

Spain

Dow Corning Ibérica, S.A.
Avenida Diagonal, 613, 5.º
08028 Barcelona
Spain
Tel: +34 (0) 93 363 69 00
Fax: +34 (0) 93 363 69 01

United Kingdom

Customer Service Center – North Europe
Dow Corning Ltd.
Meriden Business Park
Cope Drive – Allesley
Coventry CV5 9RG
United Kingdom
Tel: +44 (0) 1676 528 000
Fax: +44 (0) 1676 528 001

How to Contact Us

Dow Corning has sales offices, manufacturing sites, as well as science and technology laboratories around the globe. Telephone numbers of locations near you are available on the world wide web at www.dowcorning.com, or by calling one of our primary locations listed below.

Your Global Connection

Asia

Dow Corning Asia Ltd.– Japan
Tel: +81 3 3287 1151

Dow Corning Asia – Singapore
Tel: +65 253 6611

Australia & New Zealand

Dow Corning Australia Pty. Ltd.
Tel: +61 1300 360 732

Europe

Dow Corning S.A.
Tel: +32 64 888 000

North America

Dow Corning Corporation
World Headquarters
Tel: +1 989 496 6000

South America

Dow Corning do Brasil
Tel: +55 11 3759 4300

WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith based on Dow Corning's research and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information shall not be used in substitution for customer's tests to ensure that Dow Corning's products are fully satisfactory for your specific applications. Dow Corning's sole warranty is that the product will meet its current sales specifications. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY. UNLESS DOW CORNING PROVIDES YOU WITH A SPECIFIC, DULY SIGNED ENDORSEMENT OF FITNESS FOR USE, DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. SUGGESTIONS OF USE SHALL NOT BE TAKEN AS INDUCEMENTS TO INFRINGE ANY PATENT.

Dow Corning and *Silastic* are registered trademarks of Dow Corning Corporation.

WE HELP YOU INVENT THE FUTURE is a trademark of Dow Corning Corporation.

Printed in U.S.A.

Form No. 45-1007-01

DOW CORNING

**WE HELP YOU INVENT
THE FUTURE.™**

www.dowcorning.com