

Product Information

Silicone Rubber Compound

DOW CORNING

DOW CORNING TORAY SH 851 U High Consistency Rubber

FEATURES

- General purpose (GP)
- 50 JIS-Type A hardness

BENEFITS

- Pigmentable
- Wide service temperature
- Will accept extending fillers

COMPOSITION

- Silicone rubber

General purpose silicone rubber designed for use in a variety of molded goods

APPLICATIONS

- General rubber molding
- Rubber parts for home electric appliances
- Keypads
- OA rollers

TYPICAL PROPERTIES

Specification writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales representative prior to writing specifications on this product.

Test Method ¹	Property	Unit	Value
As supplied			
CTM 0176	Appearance		Translucent
JIS K 6249	Plasticity		230
As cured			
JIS K 6249	Density	g/cm ³	1.15
JIS K 6249	Hardness, JIS type A		51
JIS K 6249	Tensile strength, JIS#3	MPa	9.0
JIS K 6249	Elongation, JIS#3	%	350
JIS K 6249	Tear strength, angle	N/mm	22
JIS K 6249	Linear shrinkage (disc) ²	%	3.2
JIS K 6249	Linear shrinkage (sheet) ²	%	3.5
JIS K 6249	Rebound	%	71
JIS K 6249	Compression set (22 hours at 150°C/302°F)	%	9

Properties obtained using 0.6 part RC-4 (50P) (2,5-bis(tert-butylperoxy)-2,5-dimethyl hexane, 50% masterbatch) on 2mm thick slabs: molded 10 minutes at 170°C (338°F) and post-cured 4 hours at 200°C (392°F).

1. CTM: Corporate Test Method, copies of CTMs are available on request.

JIS: Japanese Industrial Standard.

2. Linear shrinkage depends on the curing conditions such as type of curing agent, curing temperature and size of molded product.

DESCRIPTION

SH 851 U Silicone Rubber is a 50 durometer general purpose silicone rubber compound especially designed to provide good results when making molded parts. It can be blended with other DOW CORNING TORAY brand silicone rubbers to obtain intermediate hardness.

It is off-white semi translucent and therefore can be easily pigmented to obtain most any color shade desired. SH 851 U Silicone Rubber is primarily used for molded parts such as keypad, gasket, and other miscellaneous goods.

HOW TO USE

For blending or pigmenting, milling with a two-roll mill is the most suitable process. Milling time should be carefully decided to secure uniformity of materials. When molding DOW CORNING TORAY one recommends RC-4 (50P) as a vulcanizing agent. Standard cure temperature is 170°C (338°F), and its cure time depends on the thickness of final products. Post-cure condition would be 4 hours at 200°C (392°F) after molding in most cases.

HANDLING PRECAUTIONS

Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The material safety data sheet is available on the Dow Corning website at www.dowcorning.com. You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

USABLE LIFE AND STORAGE

When stored at or below room temperature (away from direct sunlight), maximum 32°C (90°F), in the original unopened containers, this product has a usable life of 9 months from the date of production.

PACKAGING

This product is available in 20kg boxes.

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 Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

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

LIMITED WARRANTY INFORMATION - PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customers' tests to ensure that Dow Corning's products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

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