TECHNICAL DATA SHEET

QSil 244
45 Shore A, Thermally Conductive, Industrial Silicone Elastomer

Description

QSil 244 is a 100% addition-cured silicone designed for industrial applications where good thermal conductivity is required. This two-component product cures to a hard, low modulus elastomer that is readily repairable.

Key Features

- Solvent Free
- High thermal conductivity
- Heat cured
- Repairable

Application

- Rollers
- Electronic potting applications
- Thermal interface materials
- Thermally conductive coatings.

Use and Cure Information

Cure Profile

20 minutes at 150ºC

40 minutes at 120ºC

Mixing

In order to achieve optimum performance, the same lot number of A and B should be used. The A and B parts should be thoroughly mixed prior to catalyzation.

Mixing by hand: Catalyze the A part with the B part at the designated mix ratio by weight using a clean plastic or metal container of approximately 3 times the volume of the material and mix by hand. Accurate weighing of all components, on a suitable scale, is essential for optimal product performance when mixing by hand. Mix until the material is uniform with no visible striations.

Mixing and dispensing with automatic equipment: Use a mixing system that will properly mix the A and B parts at the designated ratio by weight.

Property	Test Method	Value
Uncured Product		
Color A		**Brown**
Color B		**Brown**
Cure Type		**Addition**
Gel Time at 25°C/77°F		**>24 hr**
Mix Ratio By Weight		**1:1**
Rheology		**Liquid**
Specific Gravity A		**2.2**
Specific Gravity B		**2.2**
Viscosity A	Brookfield	**140,000 cP**
Viscosity B	Brookfield	**140,000 cP**
Viscosity Mixed	Brookfield	**140,000 cP**
Cured Product		
Cured 30 min @ 150C and tested at room temperature		
Color		**Brown**
Elongation at Break	ISO 37	**75 %**
Hardness Shore A	ASTM D 2240-95	**45**
Max Working Temp		**204 °C / 399 °F**
Min Working Temp		**-55 °C / -67 °F**
Tensile Strength	ISO 37	**1.55 N/mm2 / 225 psi**
Thermal Conductivity		**0.88 W/mK**
Storage		
Max Storage Temperature		**38 °C / 100 °F**
Shelf Life		**24 mths**

De-aeration

Air trapped during mixing should be removed by vacuum at 29 inches of mercury. During the process, the material will expand, and intermittent evacuation may be required. Machine mixed material does not normally need to be de-aired.

Health & Safety

Safety Data Sheets available on request.

Packaging

CHT Encapsulating and potting compounds are available in a variety packaging including bulk containers. Please contact our sales department for more information.

Storage

This product is best when used within the “Use by Date”. See product label and/or CoA for specific "Use by Date". Product should be stored in its original, unopened container. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case, the properties required for the intended use should be checked for quality assurance reasons.

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CHT Germany GmbH: Postfach 12 80, 72002 Tübingen, Bismarckstraße 102, 72072 Tübingen, Germany
Telephone: 07071/154-0, Fax: 07071/154-290, Email: info@cht.com, Homepage: www.cht.com / www.cht-silicones.com