TECHNICAL DATA SHEET

QGel 301
Fast Curing, High Strength Silicone Gel

Description

QGels are addition-cure clear, soft, moderately cross-linked silicone polymer. Silicone gels provide protection from moisture, vibration, thermal, or mechanical shock.

Key Features

- 1:1 mix ratio
- Soft, but has considerably higher strength than general purpose silicone gels
- Fast 20-minute gel time at room temperature

Use and Cure Information

Important

In order to achieve optimum performance, the same lot number of the A and B components should be used. Mixed lots may not obtain the performance criteria listed on the TDS or Certificate of Analysis.

The "A" part of QGels contain the platinum catalyst; great care should be taken when using automated dispensing equipment to not cross-contaminate systems.

Mixing

Both the "A" and "B" parts should be well stirred to ensure the material is uniform. QGels should be mixed by weight. Once the components are mixed, the curing process begins. The gel time of the mixed material is listed under the typical properties. Fast curing gels should be dispensed utilizing automated mix and dispensing equipment. In order to achieve optimum performance, the same "A" and "B" side lot numbers should be used.

Property	Test Method	Value
Uncured Product		
Cure Profile		**5 min at 150°C, 10 min at 100°C, 90 min at 25°C**
Cure Type		**Addition**
Density A	BS ISO 2781	**0.97**
Density B	BS ISO 2781	**0.97**
Gel Time at 25°C/77°F		**20 min**
Mix Ratio By Weight		**1:1**
Rheology		**Gel**
Viscosity A	Brookfield	**1,000 cP**
Viscosity B	Brookfield	**2,000 cP**
Cured Product		
Color		**Transparent**
Max Working Temp		**204 °C / 399 °F**
Min Working Temp		**-55 °C / -67 °F**
Penetration (19.5g Cone Weight) mm		**5 - 9 mm**
Storage		
Max Storage Temperature		**38 °C / 100 °F**
Shelf Life		**24 mths**

De-Aeration

Air trapped during mixing should be removed to eliminate voids in the cured product. Vacuum de-airing may be necessary to completely remove all entrapped air bubbles. To ensure proper de-airing, subject the mixed material to 29 inches of mercury.

Storage and Shelf-life

This product is best when used within 24 months from the date of manufacture, See product label and/or the CoA for specific "use by date".

Product should be stored in its original, unopened container in an environment that does not exceed 38C (100F)

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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