



Technical Data Sheet

QSi 603

Quantum Silicones' 60 Durometer Self-bonding, Addition Cure
Industrial 2-part Silicone Adhesive

Product Description

Quantum Silicones' QSi 603 is a two component, heat cure, self-bonding silicone elastomer material.

Key Features

- High Durometer
- Low Viscosity
- Good Physicals
- Good adhesion to a variety of substrates

Properties

| UNCATALYZED PROPERTIES | |
|--|----------------|
| Mix Ratio | 10:1 by weight |
| BASE | |
| Base Appearance | Beige |
| Base Viscosity, cps | 40,000 |
| Base Specific Gravity, g/cm ² | 1.27 |
| CATALYST | |
| Catalyst Appearance | Blue |
| Catalyst Viscosity, cps | 2,000 |
| Catalyst Specific Gravity, g/cm ² | 1.02 |

Properties

| CATALYZED PROPERTIES | |
|-----------------------------------|-------------|
| PROPERTY | |
| Catalyzed Color | Light Blue |
| Catalyzed Viscosity, cps | 35,000 |
| Pot Life ⁽¹⁾ (minutes) | >60 minutes |

| CURED PROPERTIES 20 minutes @ 150C | |
|------------------------------------|--------------|
| Durometer, Shore A | 60-65 |
| Tensile Strength, psi | 900 |
| Elongation, % | 100 |
| Tear B, ppi | 90 |
| Linear Shrinkage, % | <0.1 |
| Useful Temperature Range | -60C to 204C |

| Cure Profile(optimized for cure & adhesion) | |
|---|---------------|
| Temperature, C | Time, minutes |
| 100 | 120 |
| 125 | 60 |
| 150 | 45 |

Mixing and De-aeration

The following procedure should be followed for obtaining optimal performance from the QSil 603.

Charge 100 parts, **by weight**, of QSil 603A and 10 parts, **by weight**, of QSil 603B into a clean, compatible metal or plastic container. Shake the catalyst well before use. The volume of the container should be 3-4 times the volume of the material to be mixed. This allows for expansion of the siloxane material as it de-gasses.

Mix thoroughly by hand or with mixing equipment while minimizing air entrapment until a homogeneous mixture is obtained. This will occur when the material takes on a uniform color with no visible striations. Once mixing * is complete it is recommended that the material be de-aired 2-3 times by intermittent evacuation for a few minutes to minimize any imperfections due to bubbles in the cured material. Typically after releasing the vacuum 2-3 times the mass will collapse on itself at which time the vacuum should be left on only 2-4 minutes longer.

* Machine mixed material does not normally need to be de-aired.

Shelf-life and Storage

QSil 603A&B should be stored in their original, sealed containers in an environment that does not exceed 90F. Under these conditions the expected shelf-life of the material is 12 months.

Not for Product Specification

The technical data listed herein is provided as a reference only and **is not** intended as sales specifications. For sales and technical assistance or for product recommendations, please call 1-800-852-3147.

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