



## Technical Data Sheet

### **A-100: Medical Silicone Adhesive**

A-100 Medical Silicone Adhesive is a one-component, low-slump, translucent Silicone used to permanently bond materials.

It is solventless and cures at room temperature upon exposure to atmospheric moisture. During the curing process, the silicone adhesive releases acetic vapor as a by-product. After final cure, the resulting silicone elastomer possesses the appearance, texture, and general composition of many conventional silicone elastomers.

#### **Composition:**

One-component adhesive/sealant

#### **Applications:**

A-100 Medical Silicone Adhesive is a one-component, low-slump, translucent silicone material for bonding elastomers, synthetics, and metals for part fabrication and medical devices.

#### **Features:**

- Cures at room temperature when exposed to atmospheric moisture
- Translucent paste
- Provided in ready-to-use containers
- Solventless

#### **Benefits:**

- Easy to apply and use

#### **Quality and Regulatory information:**

- Compliance Declarations and statements can be requested at [Sales@factor2.com](mailto:Sales@factor2.com).

#### **Packaging:**

This product is supplied in a 2oz tube.

#### **Uncured Properties**

Skinning time	7-8 <sup>[1]</sup> min
[1]: at 55% RH	

#### **Application Technique:**

Processing Temperature	23 °C
Recommended film thickness	≥250 μm

#### **Cure Conditions:**

Curing Time	24-96 h
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**Typical Mechanical Properties:**

Tensile Strength	3.3 MPa	ASTM D 412
Elongation at break	>300%	ASTM D 412
Shore A Hardness [2]: cured >72h	35 <sup>[2]</sup>	ASTM D 2240

**Other Properties:**

Density	1060 kg/m <sup>3</sup>	ISO 1183
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**Storage and Stability:**

Shelf Life	Warranted 6-months from date of shipment.
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**Characteristics:**

Compatibility	Metals
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**Additional Information:**

Adhesives

**Surface Preparation**

Surfaces to be bonded or built-up with silicone adhesive should be cleaned thoroughly with non-oily cleaners or mild soap to remove possible surface contaminants. Rinse copiously with hot water and follow with a through rinse with distilled water. Allow surface to dry.

**How To Apply**

Apply A-100 Silicone Medical Grade Adhesive, to one of the prepared surfaces, then quickly cover with the other substrate to be bonded. Apply sufficient pressure to ensure full contact, with out forcing the silicone out from between the pieces. For best results, maintain a bond thickness of at least 0.25 mm. under ambient conditions, the adhesive forms a thin without tackiness outer skin for thick-section films within a few minutes after application. Any shaping of the uncured adhesive should be completed before skin forms.

**Cure Time**

Curing or vulcanization time depends upon the thickness of the silicone adhesive layer. The relative humidity, and the accessibility of atmospheric moisture to the curing adhesive. cure time is extended at lower humidity levels. Dry heat will not accelerate the cure and should not be used for at least the first 72 hours. A 2mm thick sheet of silicone elastomer bonded to stainless steel requires approximately 24 hours for complete vulcanization. Bond strength, however, continues to increase for several days.



a 6.4 mm thick sheet of silicone elastomer bonded to stainless steel under the same conditions requires 48 to 96 hours for complete vulcanization. If the relative humidity is greater than 60 percent when curing, a tacky surface may occur – especially with thin films. The tackiness can be removed by exposing the surface to a dry atmosphere.

#### Safety Warning

Before handling, please consult the corresponding material safety data sheets. Safety data sheets are available upon request.

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