



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.

Packaging:

This product is supplied in a 2oz tube.

Uncured Properties

Skinning time	7-8 ^[1] min
[1]: at 55% RH	

Application Technique:

Processing Temperature	23 °C
Recommended film thickness	≥250 μm

Cure Conditions:

Curing Time	24-96 h
-------------	---------



Factor II, Incorporated

The Art, Science and Technology of
Silicones and Prosthetics...

5642 White Mountain Ave
PO Box 1339
Lakeside, AZ 85929
928-537-8387
sales@factor2.com

Typical Mechanical Properties:

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

Other Properties:

Density	1060 kg/m ³	ISO 1183
---------	------------------------	----------

Storage and Stability:

Shelf Life	Warranted 6-months from date of shipment.
------------	---

Characteristics:

Compatibility	Metals
---------------	--------

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, without 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.



Factor II, Incorporated

The Art, Science and Technology of
Silicones and Prosthetics...

5642 White Mountain Ave
PO Box 1339
Lakeside, AZ 85929
928-537-8387
sales@factor2.com

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.

PATENT WARNING:

Factor II Technology disclaims any expressed or implied warranty against the infringement of any patent. Factor II does not warrant that the use or sale of the products described herein will not infringe the claims of any U.S. patents or other country's patents covering the product itself or the use in combination with other products or in the operation of any process.

WARNINGS ABOUT PRODUCT SAFETY:

Factor II technology believes that the information and data contained herein is accurate and reliable; however, it is the user's responsibility to determine suitability and safety of use for these materials.

Factor II cannot know the specific requirements of each application and hereby makes the user aware that it has not tested or determined that these materials are suitable or safe for any application. It is the user's responsibility to adequately test and determine the safety and suitability for their application. Factor II makes no warranty concerning fitness for any use or purpose. There has been no testing done by Factor II to establish safety of use in any medical application. Factor II has tested this material only to determine if the product meets the applicable specification. When considering the use a Factor II product in a particular application, you should review the latest Material Safety Data Sheets and contact Factor II for any questions about product safety information you may have.

IT IS RECOMMENDED THAT THE PURCHASER THOROUGHLY TEST ANY APPLICATION PRIOR TO FULL SCALE PRODUCTION OR COMMERCIALIZATION. INFORMATION CONTAINED IN THIS TECHNICAL PROFILE SHOULD NOT BE TAKEN AS INDUCEMENT TO FRINGE ANY PATENT. FACTOR II WARRANTS ONLY THAT ITS PRODUCTS MEET ITS SPECIFICATIONS. THERE IS NO WARRANTY OF MERCHANTABILITY OF FITNESS FOR USE OR ANY OTHER WARRANTIES EXPRESS OR IMPLIED. FACTOR II MAKES NO GUARANTEE OF SATISFACTORY RESULTS

DISCLAIMER / STATEMENT OF LIABILITY:

This is to certify that the above designated material has been tested and did comply with the listed specifications (with listed exceptions) when supplied in original container. The material is subject to the conditions listed on the invoice. The above is a copy of information on file. The lot acceptance data are available for examination. This is a computer-generated document that is valid without a signature. The information above is supplied in good faith and, to the best of our knowledge, is based on available sources believed to be reliable and accurate. This document and any information provided herein are for your guidance



Factor II, Incorporated

The Art, Science and Technology of
Silicones and Prosthetics...

5642 White Mountain Ave

PO Box 1339

Lakeside, AZ 85929

928-537-8387

sales@factor2.com

only. The use by the requestor is beyond Factor II control; therefore, the responsibility for appropriate and safe use of the above information lies with the End user. Factor II shall not be responsible for any misuse and/or misapplication of the information in this document. Factor II will guarantee this product 6-months from the ship date, some restrictions apply.