

Addisil* 6101

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Description

Addisil 6101, Momentive Performance Material's Silicone adhesive, is a one-component heat curable silicone adhesive sealant which will bond to many substrates without a primer and which will cure rapidly at elevated temperatures. This product has a very long working time at room temperature and will not cure completely until exposed to elevated temperatures.

Addisil 6101 silicone adhesive is a black, thixotropic paste, which can be applied to vertical or overhead surfaces.

Key Features and Benefits

- One component product - no mixing required
- Room temperature storage
- Very fast cure at elevated temperature (in a range of 110°C to 230°C)
- Primerless adhesion to many types of substrates (e.g. aluminum, copper, stainless steel, glass, enamel, ceramic)
- No formation of cure by-products; low linear shrinkage
- Non-corrosive to metals and sensitive substrates
- Outstanding performance over a wide temperature range
- Service temperature -50°C to 250°C

Typical Physical Properties

Uncured Properties	Addisil 6101
Color	Black
Density, g/cm ³	1.11
Vertical Flow, @ 30 min.,mm	<2
Cured Properties (cured 10 min. at 175°C)	Addisil 6101
Hardness, Shore A	43
Elongation, %	580

Tensile Strength, MPa	9.2
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Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage

CAUTION

Addisil 6101 silicone adhesive can generate flammable hydrogen gas upon contact with acidic, basic, or oxidizing materials. Such contact should be avoided.

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Processing Recommendations

Compatibility

Addisil 6101 silicone adhesive will cure in contact with most clean, dry surfaces. However, certain materials, such as butyl and chlorinated rubber, sulfur-containing materials, amines, and certain metal soap cured RTV silicone rubber compounds can cause cure inhibition. Cure inhibition is characterized by a gummy appearance of Addisil 6101 silicone adhesive at the interface between the adhesive and the substrate to be bonded. It is recommended that a sample patch test be performed with Addisil 6101 silicone adhesive to determine substrate compatibility.

Surface Preparation

The adhesive performance of any polymer system is highly dependent upon proper surface preparation. In order to maximize the adhesion of Addisil 6101 silicone adhesive and minimize the potential for cure inhibition, all parts should be as clean and dry as possible prior to the application of the adhesive.

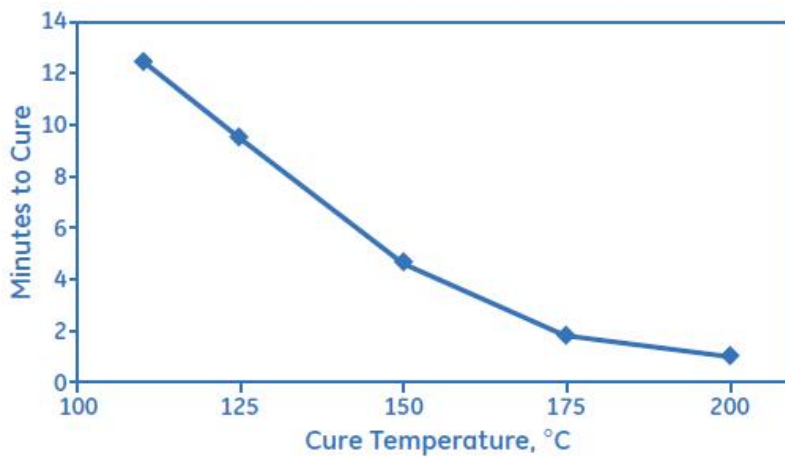
Bonding

Addisil 6101 silicone adhesives offer outstanding adhesion characteristics to a wide variety of different substrates without the need of a primer. For difficult-to-bond-to substrates, or where more aggressive chemical adhesion is desired, using SS4155 silicone primer, available from Momentive performance materials, may enhance the adhesion. To apply the primer, thoroughly clean the surface and let dry. Then apply a uniform film (0.01-0.02 mm) of SS4155 silicone primer and allow the primer to air-dry for one hour or more.

Curing

Addisil 6101 silicone adhesive requires the use of elevated temperatures in order to achieve full cure (See Figure 1 below).

Figure 1: Addisil 6101 Silicone Adhesive Cure Time vs Temperature



Temperature	Addisil 6101
125°C	<10 minutes
150°C	<5 minutes
175°C	<2 minutes
200°C	30 seconds

The actual cure time is affected by such things as cross-sectional thickness of the Addisil 6101 silicone adhesive, heat capacity of the overall assembly and efficiency and type of oven used (i.e. convection, infrared).

Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

Availability

Addisil 6101 silicone adhesive is available in 200 kg drums, 20 kg pails and 310 ml cartridges.

Shelf Life & Storage

Addisil 6101 has a shelf-life of at least 4 months from shipment, when stored below 27°C in the original unopened bulk container. Please see the product Certificate of Analysis for the most up to date storage and shelf-life conditions.

Contact Information

For product prices, availability, or order placement, contact our customer service at [Momentive.com/Customerservice/](https://www.momentive.com/Customerservice/)

For literature and technical assistance, visit our website at: www.momentive.com

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