

### Addisil\* 6101

#### Heat-Curing Silicone Adhesive

**Product Description** **Addisil 6101** 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** is a black, thixotropic paste, which can be applied to vertical or overhead surfaces.

#### Key Performance Properties

- 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. aluminium, 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 Product Data

Uncured Properties	Addisil 6101
Colour	black
Density, g/cm <sup>3</sup>	1.11
Vertical Flow, @ 30 min., mm	< 2
Cured Properties (cured 10 min. at 175°C)	Addisil 6101
Hardness, Shore A	43
Elongation, %	> 400
Tensile Strength, MPa	9.2

**Specifications** Typical product data values should not be used as specifications. Assistance and specifications are available by contacting Momentive performance materials Technical Service RTV1 and RTV2.

### Instructions for Use **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 adhesive offers 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.

<u>Temperature</u>	<u>Addisil 6101</u>
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).

### **Handling and Safety**

Material Safety Data Sheets are available upon request from Momentive performance materials. Similar information for solvents and other chemicals use with Momentive performance materials Products should be obtained from your suppliers. When solvents are used, proper safety precautions must be observed.

### **CAUTION**

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



**Shelf Life and Storage** The warranted shelf life from the material will be indicated by the “use before date” on the associated documents with a minimum of 4 months when stored in the unopened containers at 27 °C or less.

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



PRINCIPAL LOCATIONS – Regional Information

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