

Technical Data Sheet



Addisil* 6210

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Description

Addisil 6210 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 6210 is an off white one component thixotropic material.

Key Features and Benefits

- One component product no mixing required
- Room temperature storage
- Fast cure at elevated temperature (in a range of 140 °C to 230 °C)
- Primerless adhesion to many types of substrates (e.g. glass, enamel, aluminium, ceramic)
- No formation of cure by-products
- Non-corrosive to metals
- Good performance over a wide temperature range
- Service temperature -50 °C to 200°C

Typical Physical Properties

Uncured Properties	Addisil 6210
Colour	off white
Density, g/cm ³	1.21
Vertical Flow, @ 30 min., mm	< 2
Viscosity, Pa.s	160-360
Cured Properties(cured 10 min. at 175°C)	
Hardness, Shore A	50
Elongation, %	380
Tensile Strength, MPa	5.6
Tear strength, kN/m	18

The results in this table were obtained on material produced in a pilot plant configuration. Based upon our experience we expect results obtained on material produced in large scale production to be in line with the results above, despite this, actual results might deviate to some extend from the numbers reported in the table above.

Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a 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 6210 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 Material Safety Data Sheet (MSDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, and any special storage conditions required for safety. MSDS are available at www.momentive.com or, upon request, from any Momentive Performance Materials (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 6210 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 6210 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 6210 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 6210 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 6210 silicone adhesives offer good 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 6210 silicone adhesive requires the use of elevated temperatures in order to achieve full cure.

Temperature	time
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 6210 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 6210 is available in 200 kg drums and 20 kg pails.

Shelf Life & Storage

The 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.

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Contact Information For product prices, availability, or order placement, contact our customer service by visiting momentive.com/ContactSilicones.

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