MORGAN MATERIALS
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Product Data Sheet

RTV 111 and 116

| Mechanical: | RTV 111 | | RTV 116 | |
|---|---|---|---|---|
| Tensile Strength, kg/cm$^2$ (lb/in$^2$) | 28 (400) | 26 (375) | 25 (350) | 23 (325) |
| Elongation, % | 450 | 400 | 350 | 325 |
| Hardness, Shore A | 30 | 30 | 20 | 25 |
| Tear Strength, kg/cm (lb/in) | 8 (45) | 7 (40) | - | - |
| Shear Strength, kg/cm$^2$ (lb/in$^2$)(2) | 14 (200) | 14 (200) | 7 (125) | 7 (100) |
| Peel Strength, kg/cm (lb/in)(3) | 7 (40) | 7 (40) | 3 (25) | 3 (15) |

| Electrical: | | | | |
|---|---|---|---|---|
| Dielectric Strength, kv/mm (v/mil) | 20 (500) | 20 (500) | 16 (400) | 16 ( |
| Dielectric Constant @ 60 Hz | 2.8 | 2.8 | 2.8 | 2.8 |
| Dissipation Factor @ 60 Hz | .001 | .001 | .001 | .001 |
| Volume Resistivity, ohm-cm | 3x1015 | 3x1014 | 2x1014 | 6x1( |
| **Thermal:(4)** | | | | |
| Brittle Point, °C (°F) | -60 (-75) | -60 (-75) | -60 (-75) | -60 ( 75) |
| Maximum continuous operating temperature, °C (° F) | 204 (400) | 260 (500) | 260 (500) | 204 (400 |
| Maximum intermittent operating temperature, °C (°F) | 260 (500) | 315 (600) | 315 (600) | 260 (500 |
| **Additional Information:(4)** | | | | |
| Linear Shrinkage, % | 1.0 | 1.0 | 1.0 | 1.0 |
| Thermal Conductivity, | | | | |

**Surface Preparation**

RTV102, RTV103, RTV106, RTV108, RTV109, RTV 111 RTV116 and RTV118 sealants will bond to many clean surfaces without the aid of primers. These surfaces typically include many metals, glass, ceramic, silicone rubber and some rigid plastics. These adhesive sealant products will also produce fair bonds to organic rubber and to some flexible plastics not containing fugitive plasticizers (which migrate to the surface, impairing adhesion). An evaluation should be made to determine bond strength for each specific application. For difficult-to-bond substrates, use of a primer is suggested. Primers SS4004, SS4044 and SS4179 are recommended for use with these sealants. Complete information and usage instructions for these primer products are contained in a separate product data sheet, (CDS #1532).

Where adhesion is required, surfaces should be thoroughly cleaned with a suitable solvent such as naphtha or methyl ethyl ketone (MEK) to remove dirt, oil and grease. The surface should be wiped dry before applying the adhesive sealant.

When solvents are used, proper safety precautions must be observed.

**Application and Cure Time Cycle**

Paste-consistency products may be applied directly to clean or primed substrates. Where broad surfaces are to be mated, the sealant should be applied in a thin, less than 6mm (1/4 in.) diameter, bead or ribbon around the edge of the surface to be bonded.

Flowable products may be applied to clean or primed substrates by pouring directly from the original container or dipping. These products will self-level on a surface, filling small crevices and surface voids. Depth of potted sections should not exceed 6mm (1/4 in.).