

Techsil[®] RTV10533

Techsil[®] RTV10533 ONE COMPONENT FLOWABLE HIGH STRENGTH SILICONE ADHESIVE/SEALANT. Techsil[®] RTV10533 one-component, ready-to-use, adhesive/sealant is a flowable consistency product specially developed for applications where high strength is required. On exposure to atmospheric moisture at room temperature this product cures to a very tough, durable, resilient silicone rubber. Techsil[®] RTV10533 utilizes an acetoxy cure system, releasing small amounts of acetic acid vapours from the sealant during cure.

Key Performance Properties

- One-component, no mixing, easy-to-use
- Flowable
- Room temperature condensation cure
- Very high Strength
- High & Low Temperature resistance(-60°C to +200°C)
- Excellent adhesion to silicone rubbers

Applications

- Bonding silicone HCR gaskets together
- Seam sealer
- Bonding silicone coated fabric

Typical Product Data

Typical uncured Properties		
Appearance		Translucent, flowable
Viscosity at 23°C,	Pa's	175
Tack-free Time at 23°C	Minutes	10
Selfleveling	mm	75
Typical cured Properties (3 days @ 20°C / 50% RH)		
Appearance		Translucent elastomeric rubber
Density	g/cm ³	1.10
Hardness	Shore A	33
Tensile strength	МРа	7.5
Elongation	%	750
Tear strength	kN/mm	15

Specifications

Typical product data values should not be used as specifications. Assistance and specifications are available by contacting Techsil.

Instructions for use

Surface Preparation

Techsil[®] RTV10533 will bond to clean surfaces without the aid of primers. These surfaces typically include many metals, glass, ceramic, and silicone rubber. A preliminary check should be made to determine bonding effects for each specific application. For difficult-to-bond substrates, use of a primer will usually improve adhesion. We recommend Momentive performance materials silicone primers SS4004P, SS4044P and SS4179 are recommended for use with this adhesive/sealant. Where adhesion is required, surfaces should be thoroughly cleaned with a suitable solvent such as iso propylalcohol (IPA) or methyl ethyl ketone (MEK) to remove dirt, oil and grease. The surface should be wiped dry before applying the adhesive/sealant.

Contact Details

Technical Data Sheet Rev Date: April 2011



Techsil[®] RTV10533 adhesive/sealant may be applied directly to clean substrate. Where broad surfaces are to be mated, sealant should be applied in a thin, less than 6 mm diameter, bead or ribbon around the edge of the surface to be bonded

RTV adhesive/ sealants cure on exposure to moisture in the air at room temperature. The cure begins with the formation of a skin on the exposed surface of the sealant and progresses inward through the material. At 25°C and 50% relative humidity, this product will form a surface skin, which is tack free to the touch in 10 minutes. Once a skin has begun to form, further tooling of the adhesive is not advisable. High temperatures up to 70°C and high humidity will accelerate the cure process; low temperatures and low humidity will slow down the cure. During the initial stages of cure, a noticeable odour caused by the liberation of the acetic acid vapour is produced. This odour will totally disappear as the cure progresses

A 2 mm section of adhesive/sealant will cure through in 24 hours. Since cure time increases with thickness, use of Techsil[®] RTV10533 should be limited to section thicknesses of 6mm.

For removing uncured adhesive/ sealants, solvent systems such as naphtha, methyl ethyl ketone (MEK) or trichloroethylene (TCE) are most effective.

After cure, selected chemical strippers, which will dissolve the silicone rubber, are available from other manufacturers. Specific product information may be obtained on request.

Handling and Safety

Material Safety Data Sheets are available on request from Techsil. Similar information for solvents and other chemicals used with the Techsil products should be obtained from your supplier. When solvents are used, proper safety precautions must be observed.

Storage

The shelf life will be indicated by the ' use before date' on the associated documents with a minimum of 4 months when stored in the original unopened containers below 27° C.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy themselves as to the suitability of such information for their particular use.

Contact Details