

## TECHSIL® RTV27905 CLEAR GEL

Techsil® RTV27905 is one of a family of soft, adherent, clear silicone elastomeric gels designed for the encapsulation and protection of electronic components. It is a low viscosity, 2 component system that is readily mixed in a 1:1 ratio. RTV27905 is the softest gel in this group of products. It is used to provide protection from vibration, thermal or mechanical shock. RTV27905 has excellent dielectric properties and also gives excellent protection from water and many environmental contaminants.

### **Advantages**

The following describes some of the properties offered by RTV27905:

- Low viscosity
- Soft but resilient
- Simple 1:1 ratio mix
- Excellent pot life and curing characteristics
- Excellent adhesion to many substrates
- Flexible down to -55°C
- Suitable up to +200°C

### **Use and cure information**

RTV27905 is supplied in several pack sizes and consists of kits containing equal quantities of Parts A + B. Containers should always be kept sealed when not in use, and all mixing equipment must be kept clean and free from contaminants such as organo-tin, -sulphur, -nitrogen compounds which can poison the catalyst and prevent proper cure.

### **Mixing:**

Each of the RTV27905 components parts should be mixing in the recommended one-to one ratio (by volume or weight). This can be done readily either by hand or using a power mixer, avoiding excessive aeration. The curing process begins as soon as the components are mixed and the working or pot life of the mixed system is dependent on the ambient temperature conditions.

*Note that chilling the separate component parts, before and after mixing, will extend the pot life, but not indefinitely.*

### **General Characteristics:**

Uncured product:

<b>Appearance</b>	<b>Clear liquid</b>
Viscosity, mPa.s:	10000
Specific Gravity at 25°C	0.97
Mix Ratio:	1:1
Pot life, minutes:	~45

### **Contact Details**

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## Cure Properties

Temperature	Cure time (hrs):
150	0.5
100	1.0
25	20
<b>Cured Gel</b>	
Penetration (mm) [19.5g cone]	3 to 7
Volatiles, %	0.1 max
<b>Electrical Properties</b>	
Dielectric Strength, kV/mm	>18
Volume Resistivity, $\Omega$ .cm	2.1-10

## Adhesion:

Fully cured RTV27905 exhibits good adhesion to most substrates such as: Aluminium, stainless steel, ABS, polycarbonate, PCB boards, Nylon 6,6. *Customers are advised to carry out their own tests on clean, degreased substrates to ensure satisfactory adhesion is achieved.*

## Health and Safety:

Detailed advice for the safe handling and disposal of RTV27905 is given in the individual product Material Safety Data Sheets, available on request.

## Packages:

RTV27905 is supplied in kits containing equal quantities of parts A and B.

## Storage and Shelf Life:

RTV27905 should be stored in its original unopened containers at temperatures below 30°C. Under these conditions each part will remain useful for a period of 12 months.

## 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.

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