



## TOMPS VALUE RTV

*Condensation Cure Silicone Rubber  
Approximately 21-22 Shore A Hardness*

TOMPS Value RTV Silicone Rubber is a two-component condensation cure, low viscosity silicone rubber. Suitable for mould making, producing replicas of polyester, epoxy resins, urethane foam and wax etc. It can precisely reproduce the shape of the original model. TOMPS Value has exceptionally high tear strength and good elongation. Extra catalyst addition improves viscosity for air release without vacuum.

### Special Features

- High tear strength and excellent elongation
- Good styrene and PU resistance
- Low viscosity, excellent flow properties
- Variable pot life with the choice of catalyst
- Easy to use, no special equipment or conditions required

### Mix Ratio (RTV : CAT)

RTV VALUE	Value BLUE	Value RED
100	5	5

### Product Data\*

Property	Units	RTV	Value Blue	Value RED	
<b>Material</b>	-	Silicone rubber	Catalyst	Catalyst	
<b>Appearance</b>	-	White liquid	Blue liquid	Red liquid	
<b>Density (25°C)</b>	g/cm <sup>3</sup>	1.2	1-1.1	1-1.1	
<b>Viscosity (25°C)</b>	mPa.s	25000	5 – 15	5 – 15	
<b>Mix Viscosity (25°C)</b>	mPa.s	-	13500	13500	
<b>Pot Life (200g, 25°C, 50% RH*)</b>	Minute s	-	45-90	10-15	

# Technical Data Sheet



<b>Demould Time (200g, 25°C, 50% RH*)</b>	Hours	-	20	10	
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\* %RH = Relative Humidity

## **Cured Properties\***

Cured for 7 days at room temperature.

<b>Property</b>	<b>Standard</b>	<b>Units</b>	<b>Cat B5</b>	<b>Cat R5</b>	
<b>Hardness*</b>	BS 2782: Part 3: Method 365B	Shore A	20	21	
<b>Linear Shrinkage</b>	500x50x10 mm	%	< 0.2	< 0.2	
<b>Tensile Strength</b>	BS 2782: Part 3: Method 320A	MPa	3.2	3.1	
<b>Elongation at Break</b>	BS 2782: Part 3: Method 320A	%	350	360	
<b>Tear Strength</b>	BS 903: Part A3	kN/m	21	21	
<b>Service Temperature</b>	STM 24	°C	-60 to 250	-60 to 250	

## **Mould Preparation**

Ensure the master mould is clean, dust and dirt free. If the master is made of glass or ceramic, it is possible that the silicone rubber may stick to it, so a release agent is advisable. Test before committal and contact us for a suitable release if required.

## **Mixing and Pouring Instructions**

Use clean containers, which have a capacity for the rubber to expand to at least five times its volume during degassing e.g. if 1 kg is being mixed, use a 5 litre container. Add the Catalyst to the RTV at the correct ratio. Accurate weighing is essential. Mix the Catalyst into the RTV immediately. The product should be mixed thoroughly, paying particular attention to the sides and bottom of the mix vessel. Care should be taken to avoid entrapping too much air during mixing. TOMPS Value will self degas, but to achieve best results the product should be de-aired under vacuum. When vacuuming, the material will expand to approximately five times its original volume and collapse, it is at this point the material has been successfully vacuumed. Pour the vacuumed silicone rubber uniformly all over the surface of the master. Any bubbles must be broken with positive air pressure or by passing a spatula gently across the surface. For intricate moulds degas again ensuring there is sufficient room in the mould box for

expansion of the rubber. When degassing use 30 inch's or 1 bar vacuum, degassing is completed about 1 minute after the frothing ceases. Mould life and tear strength are improved with degassing.

### **Curing**

Atmospheric temperature and humidity differ from season to season. In winter months the pot life and curing time will be nearly twice their summer values. To carry out curing more rapidly, raise the room temperature to 20 – 30°C. Demould will also depend on the catalyst used, see the Product Data section.

### **Storage**

TOMPS Value RTV & its catalysts should be stored in original, unopened containers between 15 and 25°C. Always tightly reseal containers after use. Air, moisture or other contamination causes a reduction in reactivity over time.

If stored under the above conditions, TOMPS Value RTV will have a shelf life of 6-9 months, from the date of production.

### **Packaging**

TOMPS Value RTV is supplied in 0.5kg, 1kg, 2kg, 5kg or 25kg packs. CATALYSTS are supplied in 25g, 50g, 250g, 500g, 1kg & 2kg packs.

### **Further Information**

This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum.

Our technical advice, whether verbal, or in writing is given in good faith, but without warranty – this also applies where proprietary rights of third parties are involved. It does not release you from the obligation to test the products supplied by us as to their suitability for the intended process and use.

Before using any of our products, users should familiarise themselves with the relevant Technical and MSDS provided by TOMPS

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