

RTV 28 2-Part Moulding Rubber Technical Data Sheet

Product Description

RTV 28 is a high tear condensation cure 2-Part moulding rubber system. It is a room temperature condensation curing silicone compound.

The cured product is an exceptionally flexible rubber with very high mechanical properties and good shelf life stability. It is suitable for mould making of intricate patterns with extremely good pick up of fine details. Softer grades are better suited for use where there are deep undercuts.

Key Features

- Very high tear strength
- Dimentional stability
- Chemical resistant to PU and PE
- High detail pick up

Use and Cure Information

Charge 95-100 parts by weight of Base Rubber and 5 parts by weight of catalyst into a suitable plastic or metal container. The volume of the mixing vessel should be sufficient to allow for rapid expansion which takes place during the initial degassing of the catalysed rubber.

Mix thoroughly avoiding excessive air entrapment but using the colour contrast to achieve homogeneity. Stop the mixer and scrape the vessel walls a few times. To prevent imperfections due to bubbles in the cured rubber, it is advisable to de-aerate the liquid rubber by using intermittent evacuation for a few minutes. Normally after releasing the vacuum 2 or 3 times, the mass collapses naturally after which degassing should continue for only a few minutes.

Vertical Application

RTV 28 can be used to make mouldings on vertical surfaces by employing Thixotroping Agent BS4. A typical formulation for good thixotropy and approximately the same working life of the normal rubber is shown below: -

RTV 28	95-100 parts by weight
Catalyst	5 parts by weight
BS4	2-3 parts by weight

Mix the components in the above order. When using the fast cure catalyst, if degassing is required it must be done quickly after catalysation and before the addition of the Thixotroping Agent BS4. Pot life and rate of cure is slightly shorter in the presence of BS4.

Uncured Product

Property	Test Method	Value
Colour		Beige
Appearance		Viscous Liquid
Viscosity	Brookfield	34000 mPa.s
Catalysed viscosity	Brookfield	26000mPa.s
Pot life		109 minutes
De-mould time		7 hours

^{*} measured at 23+/-2°C and 65% relative humidity using standard catalyst.

Cured Elastomer

(after 7 days cure at 23+/-2°C and 65% relative humidity)

Property	Test Method	Value			
Tensile strength	BS903 Part A2	4.03 MPa			
Elongation at break	BS903 Part A2 401%				
Youngs modulus		2.00MPa			
Modulus at 100% strain	BS903 Part A2	1.56MPa			
Tear strength	BS903 Part A3	30.31 kN/m			
Hardness	ASTM D 2240-95	27° Shore A			
Specific gravity	BS 903 Part A1	1.31			
Linear shrinkage	0.46%				
Coefficient of thermal expansion					
Volumetric		709 ppm / °C			
Linear		236 ppm / °C			
Min. Service Temperature:		-50°C			
Max. Service Temperature:	AFS 1540B	200 °C			

All values are typical and should not be accepted as a specification.

Standard catalyst for use with the RTV series of Rubbers

Code	Ratio	Colour	Pot life (minutes)	De-mould (hours)
Catalyst Blue	20:1	Blue	45-120	<24
Catalyst Red	20:1	Red	15-45	<3

Health & Safety / Packaging Information

Health & Safety - Please refer to MSDS available on FibreGlassDirect.

Packages – RTV 28 is supplied in 5kg and 20kg bulk containers.

Catalyst is supplied in 250g and 1kg containers.

BS4 is supplied in 50g, 100g, 500g and 1kg containers.

Arrangements can be made to supply in other pack sizes.

Storage and Shelf Life – Expected to be 12months in original, unopened containers below 40°C.

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