

## MM820 (RTV601) 2-Part Low Tear Condensation Cure Rubber

### Introduction

**MM820** is a two component low tear room temperature condensation cure silicone system. The cured rubber is suitable for the mould making of patterns with fine details, where some dimensional stability is required. Low tear silicone moulding rubbers are cost effective for the production of moulds only requiring a few impressions. They find uses in the reproduction of shoe sole moulds and in general moulding of plan surfaces.

### Key Features

- **Easy demould**
- **Easy degassing**
- **Low viscosity**
- **Good detail pick up**

### Use and Cure Information

Pour the catalysed rubber into the mould from one point, ensuring air is not entrapped. Allow the rubber to cure before removing from the mould.

To allow the rubber to achieve its maximum physical properties and chemical resistance leave the partially cured rubber to age at room temperature for at least a further 12 hours.

### How to Use

Charge MM820 into a clean plastic or metal container, approximately 3-4 times its volume.

Add standard catalyst in the proportion of 5 parts by weight of catalyst to 100 parts by weight of the rubber base.

Mix thoroughly, slowly at first to avoid splashing and taking care to avoid excessive air entrapment.

After catalysation any entrapped air may be removed by intermittent evacuation for several minutes. The use of a sufficiently large container permits degassing without overflow.

### Catalysts

Use the following catalyst available from ACC Silicones

Code	Colour	Pot Life (Mins)	Demould (Hrs)	Feature
MM Cat VE	Green	45-120	<24	Standard
MM Cat VEI	Green	15-30	1to2	Standard fast
MM Cat V5IV	Green	45-120	<24	No R10

### Property

### Test Method

### Value

#### Uncured Product

Colour:		<b>Grey</b>
Appearance:		<b>Viscous Liquid</b>
Viscosity:	Brookfield	<b>&lt;8000 mPa.s</b>
Catalysed viscosity	Brookfield	<b>&lt;4800mPa.s</b>
Pot Life:		<b>15 minutes *</b>
De-mould time		<b>2 hours *</b>
* measured at 23+/-2°C and 65% relative humidity using catalyst VEI.		

#### Cured Elastomer

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

Tensile Strength:	BS903 Part A2	<b>1.76 MPa</b>
Elongation at Break:	BS903 Part A2	<b>150 %</b>
Tear Strength:	BS903 Part A3	<b>2.45 kN/m</b>
Hardness:	ASTM D 2240-95	<b>20° Shore A</b>
Specific Gravity:	BS 903 Part A1	<b>1.25</b>
Linear Shrinkage:		<b>0.50 %</b>
Coefficient of Thermal Expansion:		
Volumetric		<b>781 ppm / °C</b>
Linear		<b>260 ppm / °C</b>
Min. Service Temperature:		<b>-50°C</b>
Max. Service Temperature:	AFS 1540B	<b>180 °C</b>

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

**Health and Safety** - Material Safety Data Sheets available on request.

**Packages** – MM820 is supplied in 5 kg and 20 kg bulk containers. Catalyst is supplied in 250 g and 1 kg containers. Arrangements can be made to supply in other pack sizes.

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

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