# TECHNICAL DATA SHEET



# MM913 2 part moulding compound

Description

This is a two-component 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**

- High tear strength
- Flexibility for deep undercuts
- High elongation
- Easily degassed

### Application

Flexibility for deep undercut moulds

#### **Use and Cure Information**

The curing process starts as soon as the catalyst is added. Under normal conditions of temperature and humidity typical curing characteristics are described below. If the product is to be used in contact with aggressive chemicals, such as high styrene polyester resins or epoxies, it is recommended that the rubber be allowed to cure for 48 hours before use.

#### How to Use

Charge 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

Test Method Property Value **Uncured Product** 

23°C and 50% Cure Profile humidity

Cure Type Condensation De-mould Time / Full Cure at -24 hrs

23°C/73°F Mix Ratio By Weight 20:1

>45 min mins Pot Life mins at 23°C/73°F Liquid Rheology 11000 cP Viscosity Mixed Brookfield

#### **Cured Product**

Color

7 days at 23+/-2°C and 50+/-5% humidity

Density BS ISO 2781 1.23 g/cm3 Elongation at Break **ISO 37** 622 % ASTM D 2240-Hardness Shore A 15 Linear Shrinkage (%) 0.5 % Max Working Temp 200 °C / 392 °F -50 °C / -58 °F Min Working Temp Tear Resistance (N/mm) BS ISO 34-1 20.2 N/mm / 115 ppi Tensile Strength **ISO 37** 2.8 N/mm2 / 406 psi

Blue

Storage

40 °C / 104 °F Max Storage Temperature Shelf Life 12 mths

vacuum 2 or 3 times, the mass collapses naturally after which degassing should continue for only a few minutes.

### Vertical Application

This Product can be used to make mouldings on vertical surfaces by employing Thixotroping Agent, MMTA2. A typical formulation for good thixotropy and approximately the same working life of the normal rubber is shown below:

- MM900 series 100 parts by weight
- Catalyst 5 parts by weight
- MMTA2 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 MMTA2. Pot life and rate of cure is slightly shorter in the presence of TA2.

# Standard catalyst for use with the MM900 series of rubbers

Code	Ratio	Colour	Pot Life	De-Mould
MM CAT B5NT	20:1	Blue	>45 mins	<24 hrs
MM CAT R5NT	20:1	Red	15-45 mins	<3 hrs
MM CAT L6WNT	20:1	Clear	>45 mins	<24 hrs
MM CAT L8W	20:1	Clear	>120 mins	<24 hrs

MM CAT W Booster is available to speed up standard cure catalysts

### **Health & Safety**

## **Health and Safety**

Safety Data Sheets available on request.

#### **Packaging**

CHT Moulding Rubbers are available in a variety packaging including bulk containers. Please contact our sales department for more information.

**Revision Date** 29 Apr 2021

The content set out in the technical data sheet does not contain information upon which you should rely. It is provided for general information purposes only and does not constitute a product specification. You must obtain professional or specialist advice before taking any action based on the information provided in the technical data sheet.

CHT make reasonable efforts to ensure that information set out in the technical data sheet is complete, accurate, and up-to-date. CHT do not, however, make any representations, warranties or guarantees (whether express or implied) that information set out in the technical data sheet is complete, accurate, or up-to-date or that the product will be suitable for your requirements. You should carry out your own testing to determine the applicability of such information and whether the product will be suitable. CHT reserve the right to modify the technical data sheet at any time. The CHT technical service department is available to offer further information and advice and should it be needed to look at modifying current products or custom formulate a new one to meet your specific requirements. Please contact the technical service department.

CHT Germany GmbH: Postfach 12 80, 72002 Tübingen, Bismarckstraße 102, 72072 Tübingen, Germany

Revision No

30 Apr 2024 Download Date

The content set out in the technical data sheet does not contain information upon which you should rely. It is provided for general information purposes only and does not constitute a product

specification. You must obtain professional or specialist advice before taking any action based on the information provided in the technical data sheet.

CHT make reasonable efforts to ensure that information set out in the technical data sheet is complete, accurate, and up-to-date. CHT do not, however, make any representations, warranties or guarantees (whether express or implied) that information set out in the technical data sheet is complete, accurate, or up-to-date or that the product will be suitable for your requirements. You should carry out your own testing to determine the applicability of such information and whether the product will be suitable. CHT reserve the right to modify the technical data sheet at any time. The CHT technical service department is available to offer further information and advice and should it be needed to look at modifying current products or custom formulate a new one to meet your specific requirements. Please contact the technical service department.