

MM TA2 (old RTV TA2) 2 Thixotroping Agent for RTV 900 Series of Moulding Rubbers

Introduction

MM TA2 is a completely new, specially formulated thixotroping agent, for use with the MM900 series of high strength 2-part Silicone Moulding Rubbers.

It has been designed to produce an attractive butter-on consistency within seconds of addition to the catalysed or uncatalysed liquid rubber.

It can be employed with the catalyst, MM CAT B 5NT where a long working period is required or, it can be used with MM CAT R 5NT for a fast cure system, which can be demoulded within 2 hours.

Key Features

- Easy addition level
- Rapid development of thixotropy
- Suitable for vertical applications within minutes

How to use

The following examples are typical for all the MM900 Series

1. For conventional pot-life and cure cycle

MM900 Base	100 parts by weight
MM CAT B 5NT	5 parts by weight
MM TA2	2 parts by weight

Order of Addition

It is not important when using the MM CAT B 5 catalyst, however, the order of addition shown is recommended because it allows the catalyst to be fully dispersed in the liquid rubber before thixotropy is generated.

MM TA2 added at approximately 2% on the rubber generates thixotropy within 2 minutes..

A "brush on" or softer thixotropy can be achieved by adding 0.5 to 1.5% of TA2

Procedure

Catalyse the rubber in the normal way by adding 5 parts by weight of MM CAT B 5NT to 100 parts by weight of MM900 base and mix quickly with minimum aeration until uniformly blue.

Add the desired amount of MM TA2 and mix intimately into the catalysed rubber.

If necessary the catalysed rubber may be degassed by intermittent evacuation prior to addition of the thixotroping agent.

Leave to relax for a few minutes and then test, before use, on a vertical piece of cardboard or similar substrate to ensure adequate thixotropy has been achieved.

The thixotropic, catalysed rubber may be applied by normal brush or butter-on techniques for a period of up to 60 minutes or longer with certain rubbers.

(Note: the actual working time depends on the ambient temperature, humidity and the catalyst)

2. For Fast Cure and Rapid Demoulding

Reverse the order of addition described above, adding MM CAT R 5 after thoroughly mixing MM TA2 into the rubber base. Because of the much faster rate of cure, the working-or pot-life of this system is much shorter. A typical application is approximately 15 minutes and demoulding time can be as short as 2 hours and is seldom greater than 4 (all times depending on ambient temperature and humidity)

Typical Properties

Typical physical properties for MM900 Series are given in the corresponding technical data sheets.

Because of the thixotropic nature of an MM900 / MM TA2 system it is almost impossible to produce flawless sheets of rubber for physical testing.

Experience has shown that the MM900 Series Rubbers / MM TA2 catalysed with MM CAT B 5NT shows little significant change in physical properties from the conventionally cured rubber.

A slight drop in physical properties is encountered with the MM900/ MM CAT R 5NT / MM TA2 system but no more than that expected with fast curing systems.

Appearance	Clear, colourless to pale yellow liquid
Relative density at 25°C	0.90
Viscosity at 25°C	800 mPa.s

Health and Safety

All products discussed in this data sheet should be stored in their original containers at temperatures between 5 and 30°C The shelf life of MM TA2 is 18 months under the above conditions

MM TA2 is unlikely to freeze under normal storage conditions, but should freezing occur, it may be thawed without impairing its performance.

Packages

MM900 Series and other rubbers in this series are normally supplied in kit form with the appropriate amount of MM CAT B 5NT

Customers requiring MM TA2 and MM CAT R 5NT are advised to discuss their requirements with Technical Sales Department

Typical package sizes for MM TA2 are: -

50 g, 100 g, 500 g and 1 kg

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

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