

MM Cat R5 NT 2-Part Moulding Rubber Catalysts

Introduction

The MM catalysts are specially formulated for use with the MM900 series and MM800 series moulding rubbers. They offer the end user a greater flexibility to meet the requirements of the application and give some unique additional properties to products in the MM900 and MM800 series. MM NT catalysts offer the end user a less hazardous option and improved resistance to inhibition from moulding clays and polyurethane casting resins in comparison to catalysts based on dibutyltin dilaurate.

Key Features

- Long pot life catalyst
- Standard pot life catalysts
- Fast cure catalysts
- Colourless catalysts
- Application specific catalysts – leather
- Application specific catalysts – shoe sole moulding
- Booster additive for low temperature / humidity

Use and Cure Information

The curing process starts as soon as the catalyst is added to the MM900 series or MM800 series rubber base. 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 95-100 parts by weight of MM900 series or MM800 series and the relevant parts by weight of catalyst, (see table 2), 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 (where applicable) 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.

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

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Table 1 General Properties

| <u>MM Catalyst</u> | <u>Characteristic</u> |
|--------------------|--|
| CAT B5 NT | Blue, standard cure, less hazardous |
| CAT R5 NT | Red, fast cure, less hazardous. |
| CAT L6W NT | Colourless, standard cure, less hazardous |
| CAT W | Booster to accelerate cure |
| CAT L5 NT | Colourless, long pot life, leather application |
| CAT VE NT | Various colours, standard cure, shoe sole moulds |
| CAT VEI NT | Green, fast cure, shoe sole moulds. |

Table 2 Typical Curing Properties

(At 23 +/- 2°C and 45 to 55% relative humidity)

| <u>MM Catalyst</u> | <u>Addition Level</u> | <u>Pot Life (minutes)</u> | <u>Demould Time (hours)</u> |
|--------------------|-----------------------|---------------------------|-----------------------------|
| B5 NT | 5 | >45 | <24 |
| R5 NT | 5 | 15 to 45 | <3 |
| L6WNT | 5 | >45 | <24 |
| CAT W* | 1 | 15 to 30 | 1 to 2 |
| CAT L5 NT | 5 | >60 | <24 |
| CAT VE NT | 5 | >20 | <3 |
| CAT VEI NT | 5 | 5 to 20 | <1.5 |

* must be used in addition to standard cure speed MM catalyst.

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

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

Packages – 250 g and 1 kg non-returnable containers except MM Cat W which is only available in 1 kg non-returnable containers. Please contact your Regional Sales Manager to discuss other packaging options.

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