

QMCat Red 3 Fast Cure Condensation Catalyst for QM100 series

Description

This is one of several catalysts for a two-component, room temperature, condensation cure system. The cured rubber has excellent mechanical properties and good shelf-life stability.

Key Features

- Quick tack-free time
- Fast demold time
- Minimal impact on cured physical properties
- Styrene resistant catalyst is also available

Key Applications

- Molds for polyester and polyurethane resin castings
- Molds where hand mixing is required
- Glove molding applications

Use and Cure Information

CURE CHARACTERISTICS

The curing process begins as soon as the catalyst is mixed with the base. The material will cure as described in the data above under normal temperature (25°C) and humidity conditions (50% RH). Because this system is sensitive to heat and humidity, a change in cure speed may be observed if one or both of these variables are altered. A large difference in temperature (+/- 5°C) or humidity (> 60% – 70%) may alter the cure profile of the material. In addition, if the product is to be used with aggressive resins such as high styrene polyester resins, it is recommended that the rubber be allowed to cure for 48 hours.

MIXING

The catalyst should be thoroughly mixed prior to catalyzation of the base.

CHT recommends that the catalyzed material be tested on a small area of the mold prior to use.

The base should be thoroughly mixed with the catalyst of choice using a 10:1 ratio (base:catalyst) by weight. Shake the catalyst well before use. Material should be mixed in a clean, compatible metal or plastic container. The volume of the container should be 3 - 4 times the volume of the material to be mixed. This allows for expansion of the siloxane material during de-aeration.

Mix thoroughly by hand or with mixing equipment while minimizing air entrapment until a homogeneous mixture is obtained. This will occur when the material takes on a uniform color with no visible striations. Machine mixing is recommended for best results.

DE-AERATION

Air trapped during mixing should be removed by vacuum at 29 inches of mercury. During the process, the material will expand, and intermittent evacuation may be required. Typically, after releasing the vacuum 2 - 3 times, the mass will collapse on itself at which time the vacuum should be left on for an additional 2 - 4 minutes.

Health & Safety

Safety

Please observe our safety data sheets and the safety remarks on our container labels when handling our products. The dangerous goods regulations and the accident prevention regulations of the professional associations must be particularly observed. Keep the safety data sheet of the applied product at hand since it provides you with useful instructions for the safe use and disposal of the product as well as for actions to be taken in case of accidents.

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Property

Uncured Product

Appearance

Color

Cure Type

De-mould Time / Full Cure at 23°C/73°F

Mix Ratio By Weight

Pot Life mins at 23°C/73°F

Specific Gravity

Tack Free Time / Skin Formation at 23°C/73°F

Viscosity

Test Method

Brookfield

Value

Liquid

Red

Condensation

4 to 6 hrs

10 to 1

15 mins

1.00

45 to 60 mins

< 500 cP

Storage

Max Storage Temperature

Shelf Life

38 °C / 100 °F

12 mths

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