TECHNICAL DATA SHEET

QMCat Clear FG
Food Grade Condensation Cure Catalyst for QM100 series

Description

This is a room temperature, two-component condensation cure catalyst for QM 107, QM 113, QM 122, QM 128, QM 140 and QM Skin 30. The cured rubber has excellent mechanical properties and good shelf life stability.

Key Features

- CFR 177.2600 compliant when used with one of the bases listed above.
- Quick tack-free time
- Relatively fast demold time
- Minimal impact on cured physical properties

Key Applications

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

Property	Test Method	Value
Uncured Product		
Appearance		**Liquid**
Color		**Translucent**
Cure Type		**Condensation**
De-mould Time / Full Cure at 23°C/73°F		**12 to 16 hrs**
Mix Ratio By Weight		**10 to 1**
Pot Life mins at 23°C/73°F		**15 to 45 mins**
Specific Gravity		**1.01**
Tack Free Time / Skin Formation at 23°C/73°F		**4 to 6 hrs**
Viscosity	Brookfield	**250 to 500 cP**
Storage		
Max Storage Temperature		**38 °C / 100 °F**
Shelf Life		**12 mths**

Use and Cure Information

CURE CHARACTERISTICS

Compliance with CFR 177.200 is dependent on mixing QM Cat Clear FG at a 10:1 (base:catalyst) ratio by weight with the QM 107, QM 113, QM 122, QM 128, QM 140 or QM Skin 30 . Any compositional deviation will result in the material being non-compliant, due to lack of extraction testing on that particular composition. This applies to off ratio mixing as well as the use of any additives.

Suitability for any application is to be determined by the end user. This material has not been subjected to tests appropriate for medical device or pharmaceutical applications.
CHT makes no representations or warranties, either expressed or implied, of machinability, fitness for a particular purpose or any other nature with respect to the product to which the above information refers.

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

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

The base of the QM 100 series of products 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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