



Technical Data Sheet

Flex Cat 25

Condensation Cure, Moldmaking Catalyst for Flex 25

PRODUCT DESCRIPTION

Flex Cat 25 is a two-component, room temperature, condensation cure catalyst for Flex 25. 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

MAIN APPLICATIONS

- Molds for polyester, polyurethane and epoxy resin castings
- Molds for large and small statues
- Molds for technical articles and prototypes
- Molds for furniture and picture frame replication
- Molds for GFRC pre-cast

TYPICAL PROPERTIES

UNCATALYZED	
PROPERTY	Flex Cat 25
Color	Green
Viscosity	100 cps
Specific Gravity	1.00

CATALYZED	
MIX RATIO 10:1 by weight	
PROPERTY	Flex Cat 25
Color	Dark Green
Work life AT 25°C *	60 minutes
Tack-free time	4 - 6 hours
Demold time	8 - 10 hours

* Work life is defined as the amount of time required for the material to double in catalyzed viscosity.



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CURED PROPERTIES

See individual data sheet for Flex 25.

CURE CHARACTERISTICS

Flex Cat 25 is the catalyst of choice for Flex 25. It is catalyzed at a 10:1 ratio by weight. Faster cure can be obtained using DBT or an increased level of Flex Cat 25. However, rapid cure of condensation cure moldmaking rubber often results in a small sacrifice of physical properties or an increase in hardness.

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

Flex Cat 25 should be thoroughly mixed prior to catalyization.

QSi 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 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.



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STORAGE AND SHELF LIFE

This product is best when used within 12 months from date of manufacture. See product label and/or CoA for specific "Use By Date".

Product should be stored in its original, unopened container in an environment that does not exceed 38°C (100°F).

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case, the properties required for the intended use should be checked for quality assurance reasons.

DISCLAIMER

The technical data listed is provided for reference only and is not intended as product specifications. QSi has the capability to customize products as requested. For sales and technical assistance, please contact customer service at (804) 271-9010 or 1-800-852-3147.

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