

# T-70 MX-30 VERTICAL HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM) CRACK SEALER

T-70 MX-30 Vertical is a specially formulated, high molecular weight methacrylate resin system that is highly effective for sealing and filling cracks in concrete structures.

# **APPLICATION PROCEDURE**

#### **Surface Preparation**

All concrete surfaces that are to receive T-70 MX-30 Vertical are to be visibly clean, sound and dry to the touch. Before application the surface must be dry for 24 hours and just prior to application cracks should be cleaned with dry high pressure compressed air. The ambient temperature should be between 50°F-100°F / 10°C-38°C prior to resin application.

### Mixing

Table 1 lists the mixing ratios of the two curing agents. Add the appropriate amount of Cobalt Napthenate promoter to T-70 MX-30 Vertical resin and stir well. Then add the corresponding amount of CHP initiator, stir again for 1-2 minutes. If machine applied, the resin should be mixed utilizing a two component resin system using promoted resin for one part and initiated resin for the other part. Mixing ratio of promoted / initiated resin should be 1:1. The mixed resin should be applied to the concrete surface within 10 minutes of complete mixing.

Table 1: Mixing Instructions for T-70 MX-30 Vertical, Cobalt Napthenate and CHP

T-70 MX-30 Vertical (gal)	Cobalt Napthenate (ml)	CHP (ml)
1	75	150
5	375	750

CAUTION: Never mix CHP initiator with Cobalt promoter. A violent reaction will result!

#### **Application**

The rate of application of promoted / initiated resin should be approximately 60 ft $^2$ /gal for the first coat and 100 ft $^2$  per gallon for every additional coat. Coverage rates will vary depending on the surface, porosity, size, and quantity of cracks present in the area being treated.

T-70 MX-30 Vertical is to be hand applied using brushes or rollers. Excess material should be redistributed within 10 minutes after application. The quantity of initiated / promoted resin mixed at one time should be limited to five gallons for manual application.

Table 2: Cure Times\* for T-70 MX-30 Vertical

Ambient Temperature °F / °C	Approximate Cure Time (hr)
50-70 / 10-21	8-16
70-100 / 21-38	5-8

Table 3: Properties\*\* of T-70 MX-30 Vertical

Property	Results	Test Method
Viscosity	1,500 cps	ASTM D2556
Density	8.5 lb/gal	ASTM D1475
Gel Time / Pot Life @ 70°F / 21°C	50-60 min	AASHTO T237
Tack Free Time @ 70°F / 21°C	6-8 hr	AASHTO T237
Solids Content	100%	ASTM D1644
Tensile Strength	>300 psi	ASTM D638 Type I
PCC-SSD Bond Strength	>615 psi	CA Test 551
Tensile Elongation	>10%	ASTM D638 Type I



#### **PACKAGING**

T-70 MX-30 Vertical comes in one and five-gallon containers. The initiator, Cumene Hydroperoxide (CHP) and the Cobalt Napthenate promoter are provided in separate labeled containers and in pre-measured quantities to make scale mixes of T-70 MX-30 Vertical.

#### **STORAGE**

T-70 MX-30 Vertical should be stored in tightly sealed containers in a dry location and at normal room temperatures (50°F-85°F / 10°C-30°C). The initiator, Cumene Hydroperoxide (CHP) and the Cobalt Napthenate promoter are provided in separate labeled containers, and should be stored in a cool shaded area separately from each other and away from the resin.

## **CAUTION**

Direct contact with T-70 MX-30 Vertical may produce minor skin irritations to persons prone to such reactions. It is recommended that all persons involved in mixing and application wear protective clothing such as goggles, rubber boots, and rubber gloves. As with all chemicals, read SDS prior to use

**WARRANTY:** The following warranty is made in lieu of all other warranties, either expressed or implied. This product is manufactured of selected raw materials by skilled technicians. Neither seller nor manufacturer has any knowledge or control concerning the purchaser's use of product and no warranty is made as to the results of any use. The only obligation of either seller or manufacturer shall be to replace any quantity of this product that proves to be defective. Neither seller nor manufacturer assumes any liability for injury, loss or damage resulting from use of this product.

<sup>\*</sup>Cure times are approximate and will vary with ambient and substrate temperature, humidity, and sunlight. Structures can be opened to traffic only after complete cure is achieved.

<sup>\*\*</sup>The value ranges stated in this Technical Data Sheet are based on system processing under laboratory conditions. Equipment configurations and / or field application conditions may produce variances in final system values.