



**MAPECURE DR / MAPECURE DR 1D**  
**Water-Based, Dissipating-Resin Curing Compounds**

**SECTION 03 39 00**  
**CONCRETE CURING**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A Curing compounds for concrete.

**1.2 RELATED SECTIONS**

- A Section 03 30 00 – Cast-in-Place Concrete

**1.3 REFERENCES**

- A ASTM International (ASTM):

- 1. ASTM C309, Type 1, Class A and B – Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.

- B ASSHTO: M148, Type 1, Class A and B.

**1.4 SUBMITTALS**

- A Submit under provisions of Section 01 30 00 - Administrative Requirements.

- B Product Data: Manufacturer's data sheets on each product to be used, including:

- 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.

- C Verification Samples: For each finish product specified, two samples, minimum size 6" (150 mm) square representing actual product, color and patterns.

**1.5 QUALITY ASSURANCE**

- A Manufacturer Qualifications: Minimum 5 years' experience manufacturing similar products.

- B Installer Qualifications: Minimum 2 years' experience installing similar products.

- C Source Limitations: For repair products, obtain each color, grade, finish, type, and variety of product from single source and from single manufacturer with resources to provide products of consistent quality in appearance and physical properties.

- D Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.

- 1. Finish areas designated by Architect.
  - 2. Do not proceed with remaining work until workmanship is approved by Architect.
  - 3. Refinish mock-up area as required to produce acceptable work.



## 1.6 PRE-INSTALLATION MEETINGS

- A Convene at least two weeks prior to starting work of this section.

## 1.7 DELIVERY, STORAGE AND HANDLING

- A Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.

- B Handling: Handle materials to avoid damage.

## 1.8 PROJECT CONDITIONS

- A Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

## 1.9 SEQUENCING

- A Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

# PART 2 PRODUCTS

## 2.1 MANUFACTURERS

- A Product Performance:

Solids content	> 15%
VOCs (Rule #1113 of California's SCAQDM)	300 g per L
Moisture loss – ASTM C156	< 0.55 kg per m <sup>2</sup>
Color	Pale yellow for Mapecure DR; red for Mapecure DR 1D

- B Acceptable Manufacturer:

MAPEI North America  
1144 E. Newport Center Dr.; Deerfield Beach, FL 33442  
Toll-Free for CRS Technical Services: Tel. 888-365-0614  
Email: [CRS@mapei.com](mailto:CRS@mapei.com)  
Web: [www.mapei.com](http://www.mapei.com)

- C Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

- D Substitutions: Not permitted.

## 2.2 CURING COMPOUNDS FOR CONCRETE

- A Water-based, membrane-forming curing compound for freshly placed concrete.



Formulated from specially selected dissipating resins.

1. Product: Subject to compliance with requirements, provide MAPEI Corporation; Mapecure DR.
2. Meets or exceeds performance when tested at ASTM D309 standards.

## 2.3 MISCELLANEOUS MATERIALS

A Portland cement: ASTM C150/C150M, Type I, II or III unless otherwise indicated.

B Water: Potable.

## 2.4 MIXES

- A General: Mix products in clean containers according to manufacturer's written instructions.
1. Do not add water, thinners or additives unless recommended by manufacturer.
  2. When practical, use manufacturer's premeasured packages to ensure that materials are mixed in proper proportions. When premeasured packages are not used, measure ingredients using graduated measuring containers; do not estimate quantities or use shovels or trowels as units of measure.
  3. Do not mix more materials than can be used within time limits recommended by manufacturer. Discard materials that have begun to set.

# PART 3 EXECUTION

## 3.1 PREPARATION

- A All surfaces should be free of any dirt, residue and debris, and free of standing water.
- B Apply Mapecure DR and Mapecure DR 1D as soon as possible at the recommended coverage rate after final finishing of concrete.

## 3.2 MIXING

Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet for details.

A Mapecure DR and Mapecure DR 1D are packaged as ready-to-use. Stir or agitate thoroughly before use.

## 3.3 INSTALLATION

- A Apply Mapecure DR immediately after final finishing of concrete.
- B Apply using a low-pressure, airless industrial sprayer with a fan tip (rated at 1 U.S. gal. or 3.79 L per minute); or a roller with a 3/8" (10-mm) nap.
- C Mapecure DR begins to dissipate and lose adhesion from the concrete 4 to 6 weeks after application – depending on the application rate, moisture level in the concrete, and exposure to ultraviolet light, weathering and traffic.

END OF SECTION