



## REMR MATERIAL DATA SHEET CM-SE-1.65

### CONCRETE SEALER: CANYON TONE STAIN

1. NAME	Property	Value	Method
CANYON TONE STAIN	Solids by volume	21% ( $\pm 2$ )	Calculated
2. MANUFACTURER	Weight per gal	8.3 lb ( $\pm 0.2$ lb) (0.98 kg/l)	ASTM D 1475
United Coatings E 19011 Cataldo Green Acres, WA 99016 Telephone: 509-926-7143	Permeance†	5.6 perms (0.154 metric perm)	ASTM E 398
3. DESCRIPTION	Dry time*	10 min	ASTM D 1640
Canyon Tone Stain is a pure acrylic, water-repellent penetrating stain. This unique penetrating stain contains methyl methacrylate-ethyl acrylate copolymer resins and inorganic oxide toning pigments.	Cure time*	30 min	ASTM D 1640
	Gloss	3.5 (60° Gardner)	ASTM D 523
	Low & high temp service limits	-70 °F to 200 °F (-56 °C to 94 °C)	

#### 4. USES & LIMITATIONS

Uses: Canyon Tone Stain is used as a sealer to reduce absorption of moisture into the pores of concrete and masonry surfaces.

Limitations: Canyon Tone Stain should not be applied over damp surfaces. It should not be applied over surfaces which have been previously painted or over wood surfaces.

#### 5. MANUFACTURER'S TECHNICAL DATA

Property	Value	Method
Solids by weight	32% ( $\pm 2$ )	ASTM D 1353

† Value listed for 10 mils (254 microns).

\* Dry time and cure time at 75 °F (24 °C), 50% rh.

Packaging & Mixing: Canyon Tone Stain is a single component, ready-to-use material available in 5-gal pails (19 liters) and 55-gal drums (209 liters).

Thoroughly mix material for a minimum of five minutes prior to application. Do not thin the material. Use an air-operated or other explosion-proof mixer with a blade capable of uniformly mixing entire container.

Shelf life: Unlimited in unopened containers.

Materials should be stored at temperatures no lower than 20 °F (-6 °C) or higher than 100 °F (38 °C). Do not open container until ready to use the material.

6. MANUFACTURER'S GUIDANCE FOR APPLICATION

Sample area application: United recommends that a sample application be done by the contractor using the desired Canyon Tone Stain color.

This application will help determine the best absorption rate for achieving color uniformity and the suitability of the application technique employed.

Surface preparation: All surfaces must be structurally sound, clean, dry, fully cured, and free from dust, curing agents, form release agents, efflorescence, scale, or other foreign materials. All previous coatings on the substrate must be completely removed, including coatings which are tightly adhered to the surface.

Application: Apply Canyon Tone Stain with airless spray equipment. Any airless spray equipment capable of 1,000 psi and 1/2 gal per min delivery can be used for application.

A reversible self-cleaning spray tip with orifice size of 0.013 to 0.017 in. and minimum 40-deg fan angle is recommended.

Brush or roller application is recommended only for edging work for confined areas which would require extensive masking or protection from spray application. When applying Canyon Tone Stain with a brush or roller, exercise care so as not to apply material at a coverage rate which exceeds that which has been spray applied. If two separate applications are applied by two or more methods of application

and different coverage rates, variations in the finish color could result.

Apply Canyon Tone Stain in two separate applications. The first application will achieve an indepth penetrating color base. The second application will achieve color uniformity, aesthetic stain tone, and water repellency and can be applied as soon as the first application is dry.

For spray applications, first spray in a uniform horizontal direction and then in a uniform overlapping vertical direction. Hold the gun not more than 18 in. from the wall. Take care to prevent runs or sags during application.

Caution: Solvents are flammable in liquid state. Use only in a well ventilated area.

Avoid breathing vapor or spray mist. For exterior applications, wear approved (MESA/NIOSH) chemical cartridge respirator. For interior application, provide mechanical exhaust ventilation. Wear airline masks or positive pressure hose masks during interior applications.

Estimated coverage rates:

<u>Substrate</u>	<u>Sq ft/gal Estimated</u>
Concrete	
Cast-in-place*	150
Precast*	150
Glass fiber reinforced concrete (GFRC)*	150
Concrete block	
Standard†	100
Lightweight	50
Split Face (Fluted)†	50

\* Apply approximately 1/2 total number of gallons in each of the two separate applications.

<u>Substrate</u>	<u>Sq ft/gal Estimated</u>
Brick†	75
Stucco	
Sprayed-on†	50
Trowelled†	100

† Apply approximately 2/3 the total number of gallons on the 1st application and the remaining 1/3 total number of gallons on the 2nd application.

Note: The above absorption (coverage) rates are provided for estimating purposes only. Absorption rates will depend upon the texture and porosity of the substrate. Allow for extra surface area when estimating coverage for raked joints and fluted or split face surfaces.

#### 7. CORPS OF ENGINEERS' EVALUATION (tested as concrete sealers only)

##### Physical and mechanical properties:

Percent solid  
 (ASTM D 1644, Method A): 32.8%

Percent moisture absorption  
 (ambient temp) (ASTM C 642-82):

1 day	0.40%
2 days	0.68%
4 days	0.96%
7 days	1.28%

Ratio of percent moisture absorption  
 for treated to nontreated specimen  
 (2-day submersion): 14.5%

Percent vapor transmittance (see REMR  
 Technical Note CS-ES-1.8):

2 days	0.68%
4 days	1.20%
7 days	1.88%

Ratio of percent vapor transmittance  
 for treated to nontreated specimen  
 (2-day diffusion): 37.4%

#### 8. ENVIRONMENTAL CONSIDERATIONS

Reasonable caution should guide the preparation, repair, and cleanup phases of activities involving potentially hazardous and toxic chemical substances. Manufacturer's recommendations to protect occupational health and environmental quality should be carefully followed. Material safety data sheets must be obtained from the manufacturers of such materials. In cases where the effects of a chemical substance on occupational health or environmental quality are unknown, chemical substances should be treated as potentially hazardous toxic materials.