

ENDURABLE CURING AGENT

Endurable Curing Agent is designed to apply to newly placed concrete to keep moisture from escaping the concrete, allowing a better and stronger cure.

ADVANTAGES

- Fast reaction times -- typically under 1 hour
- Concentrated to lower shipping costs
- Increases abrasion resistance
- Increases moisture resistance
- Reduces dusting
- Reduces efflorescence
- Water-based
- Zero VOC content
- Non-toxic
- Safe to handle
- Does not require agitation
- Does not require hazardous disposal
- Improves performance of concrete
- Extends life of concrete
- Increases surface hardness
- Increases compressive strength
- Reduces permeability
- Allows proper vapor transmission for proper curing
- Reduces mineral salts intrusion
- Reduces water migration
- Makes ice removal easier
- Makes cleaning easier
- Reduces freeze/thaw damage
- Lowers creep potential

WHERE TO USE

Use on newly placed concrete.

PACKAGING

64 oz. concentrate to make 5 gallons

COVERAGE RATES

200 - 250 square feet per gallon

PRODUCT AVAILABILITY

Product is available at retail distributors around the world. Visit the Endurable website to find the nearest distributor.

REGULATORY INFORMATION

VOC CONTENT - 0 g/L

LEED

At 0 g/L of VOC content, product may contribute towards LEED certification.

UNDERSTANDING THE CHEMISTRY

The reaction of the material with the remaining unreacted calcium hydroxide in the concrete, forms calcium silicate hydrate. When concrete is poured, calcium silicate hydrate is formed as the concrete cures. This process only continues while the concrete remains wet. After the concrete is dry, no additional calcium silica hydrate is formed and the top surface of the concrete is usually left with unreacted calcium hydroxide, also known as lime. Obviously, the first part of the concrete to dry is the surface, therefore leaving a substantial amount of unreacted calcium hydroxide. This unreacted calcium hydroxide is akin to an epoxy with only the first component used. The hardener acts like the second component of the epoxy to actually create the chemical reaction, leaving the concrete harder and more abrasion-resistant. This proprietary material is distinctive in its ability to bond to the silica already present in concrete and it can also bond to itself.

PREPARATION

Before application, verify the temperatures will exceed 40 degrees during and for several hours after application. If temperatures exceed 90 degrees Fahrenheit prior to application, spray the surface with water to cool the surface. The concrete should be wet but not puddled. Disperse any puddles before application of product.

MIXING INSTRUCTIONS

This product is concentrated and should be mixed with 4.5 gallons of water in a 5-gallon bucket. Shake product before mixing with water. Stir the concentrate and water together for 30 seconds with a mixing drill and paddle. It may also be shaken for 1 minute.

APPLICATION

Use a low-pressure pump sprayer with a conical tip that sprays .05 to .15 gallons per minute. Spray with the tip 1 to 2 feet above the surface and use a circular motion to achieve an even application. Spray enough product to achieve an even look of saturation. It is recommended to apply the first coat in one direction and the second coat in the other direction (90 degrees from the angle applied in the first application.) If any puddles are present within 5 minutes of application, disperse the puddle with a broom. Do not allow puddles to dry. After forms are removed, spray the newly exposed areas with product.

TEST DATA

- **ABRASION RESISTANCE (ASTM C779) 33% increase at 30 minutes**
- **COMPRESSIVE STRENGTH (ASTM C39) 40% increase at full concrete cure**
- **IMPACT RESISTANCE (ASTM C805) 14% increase at full concrete cure**
- **EPA AND USDA COMPLIANT**
- **ASTM C666 Freeze-thaw resistance**
- **ASTM C23-89 Artificial weathering**
- **ASTM C309 Type 2, Class A, Curing compound**
- **ASTM D-1644-91 Non Volatile**
- **ASTM D-5084-91 Permeability**
- **ASTM C67 Section 10 Efflorescence**
- **AASHTO T260-89 Chloride Ion content**
- **AASHTO T259-89 Chloride Ion penetration**

LIMITATIONS

Product should not be cleaned with citric or abrasive cleaners. Endurable Surface Cleaner should be used for long-term maintenance. This product is not a “sealer” and will not prevent staining. Use an Endurable sealer or coating if you wish to seal and protect from staining.

WARRANTY

Evaluate whether this product is suitable for your intended application. Conditions of product use are outside of our control and vary widely, the following is made in lieu of all express or implied warranties of merchantability: Our only obligation and your only remedy are replacement of product, at the option of Endurable. In no case will Endurable be liable for any direct, indirect, special, incidental, or consequential damages including lost profits, goodwill, or business opportunity.

TECHNICAL ASSISTANCE

For technical questions or support, call 800-910-3120 ext. 1 between the hours of 8:30 am to 4:30 pm PST.

STORAGE AND SHELF LIFE

Product has a shelf life of a minimum of 3 years in original containers. Store product between 40 and 80 degrees Fahrenheit. Keep product free from excessive heat, moisture, and freezing.

SAFETY

Use with proper ventilation. May cause eye and skin irritation. If you experience headaches, dizziness, or watery eyes, you may wear a NIOSH TC-84 respirator during application. Use extreme caution when walking on wet product, as the product is slippery when wet.