Last Modified: Mar 16, 2022

# Ecologic<sup>TM</sup> Acrylic Latex Additive

Ecologic<sup>TM</sup> Acrylic Latex Additive is a non reemulsifiable, architectural grade, acrylic latex admix for Natural Hydraulic Lime, Portland cement and gypsum-based mixes. Ecologic<sup>TM</sup> Acrylic Latex Additive has been formulated to enhance performance by improving the bond to masonry, strength, flexibility, adhesion, cohesion, and overall 'stickiness' of mortars along with adding more water resistance and a faster speed of curing as properties to enhance specialty mortars.

#### **Further Benefits**

- Helps reduce shrinkage and improves crack resistance.
- Improves workability of the mix.
- Will not re-emulsify or soften even in underwater water applications. (Not recommended for exposure to water treatment chemicals and continual soft water immersions without an impervious topping coat applied to protect it.)
- Can be used on the interior or exterior, on floors or walls, above or below grade.
- Is non-toxic, non-flammable, and non-staining.

## **Mixing**

Stir or shake Ecologic<sup>TM</sup> Acrylic Latex Additive before use. Thoroughly premix all dry mortar ingredients first. A dilution of 10-20% Ecologic<sup>TM</sup> Acrylic Latex Additive diluted into 80-90% clean, potable mixing water can be used for Natural Hydraulic Lime and Natural Cement based mortars. The optimal dilution is 15% Ecologic<sup>TM</sup> Acrylic Latex Additive to 85% water to minimize any negative effect of reducing a desired high breathability of these types of mortars. Portland cement based mixes can have up to a 1/3 part Ecologic<sup>TM</sup> Acrylic Latex

Additive diluted into 2/3 part mixing water for high strength bonding mortar. When Ecologic<sup>TM</sup> Acrylic Latex Additive is used neat with no water added in a 1 part Portland cement to 1-2 parts aggregate mix it will have maximum bond and durability for making concrete re-surfacing mixes for walks, garage floors and concrete driveways in thin overlays of 1/2" down to 1/8" thick. In a clean container add the dry blended mix to the liquid and stir or blend slowly. When using a drill mixer, the drill should be run on slow speed and be of sufficient size to turn through the mix at the slow speed to eliminate over-mixing and to avoid the entrapment of air in the mix. Mix thoroughly for only 1-2 minutes or just until all material is wet down, lump-free and made to the desired consistency which is suitable for the application.

## **General Application**

Masonry surfaces must first be clean of all traces of curing agents, form release agents, oil, grease, dirt, dust, efflorescence, mold, other biological contaminants.

Masonry surfaces must then be pre-wetted but have no standing water remaining before the application of Ecologic<sup>TM</sup> Acrylic Latex Additive which is intended to be placed directly onto the substrate. Masonry surfaces must also be pre-wetted but have no standing water remaining before the application of any mixes containing Ecologic<sup>TM</sup> Acrylic Latex Additive which will then be placed directly onto the masonry.

In all cases after mixing, promptly place Ecologic<sup>TM</sup> Acrylic Latex Additive modified material with a steel trowel. Do not over trowel. The trowel should be kept clean to avoid pulling. Very little pressure should be used when finishing. Lubricate trowel as needed with the mixing water containing Ecologic<sup>TM</sup> Acrylic Latex Additive to prevent a "wet drag." Clean trowels

frequently. For Ecologic<sup>TM</sup> LimeCrete mixes which are used to make Lime Concrete or when placing Portland cement-based concrete mixes, a metal straightedge may be used to screed the mix. A short vibratory stroke while keeping a buildup of material ahead of the screed is encouraged. Wash hands and equipment with water immediately after use.

#### **Curing**

Ecologic<sup>TM</sup> Acrylic Latex Additive is self-curing under high dosage conditions; therefore, the need for excessive damp curing is not as necessary for Natural Hydraulic Lime and Natural cement-based mixes containing 20% of Ecologic™ Acrylic Latex Additive to water. Do not use membrane curing compounds or non-breathing blankets to shelter the work. In hot, dry, sunny, or windy conditions cover the work with damp burlap or with plastic to keep rain off the work by sheltering it so that the covers will still allow air to flow underneath the covers. Do not lay the plastic directly on the work as mottling may occur. The surface of Ecologic<sup>TM</sup> LimeCrete Floors should be ready for light foot traffic in 48-72 hours and put into standard light-duty service after one week of curing. Portland cement based concrete can receive light foot traffic in 24-48 hours and receive heavy traffic in 96 hours. Allow to cure for 7 days in wet areas such as pools and showers for all applications.

### **Bonding Coats**

In certain applications, it may be desirable to increase the bond strength of repair materials such as when using Saint-Astier® Lithomex for repairing certain tight grained stones. These applications include the repair of marble for memorial stones and marble statuary, slate, granite, basalt. For increasing the bond strength apply Ecologic<sup>TM</sup> Acrylic Latex Additive directly to the center of the broken edges of the repair area and then slightly scrub it into the surface to reduce air pockets. This should be done before applying the repair mortar. The repair mortar should be applied after five minutes of setting time to allow the Ecologic<sup>TM</sup> Acrylic Latex Additive to get tacky but within 20 minutes of applying the repair mortar with time still allowed afterward to do the finishing but intended not to allow the Ecologic<sup>TM</sup> Acrylic Latex Additive to start to set hard after one hour in the Saint-Astier® Lithomex alone. Ecologic™ Mortar based on Natural Hydraulic Lime,

along with Ecologic<sup>TM</sup> LimeCrete and Ecologic<sup>TM</sup> LithoCast (used for cast stone production or repair) should receive a 15% dilution of Ecologic<sup>TM</sup> Acrylic Latex Additive to 85% water when using these materials for these types of repairs upon these substrates and in conjunction with applying an un-cut bonding coat. The same application of neat Ecologic<sup>TM</sup> Acrylic Latex Additive can be applied when repairing Portland cement based concrete by brushing, spraying, or rolling on a coat of undiluted Ecologic<sup>TM</sup> Acrylic Latex Additive. For rough or spalled areas, a slurry coat of Ecologic<sup>TM</sup> Acrylic Latex Additive, undiluted and mixed with pure Portland cement to the consistency of a batter can also be liberally but thinly brushed on a Portland cement based concrete repair area that will receive a repair material such as LithoCast to repair spalled concrete. All neat slurry coats should not dry but remain tacky and not allowed to fully set before the finishing material is applied.

#### **Technical Data**

Ecologic<sup>TM</sup> Acrylic Latex Additive modified mixes should not be applied when temperature is below 40°F within 48 hours. Do not use with air-entrained cement or additives.

Store and transport only in unopened containers in climates between 40 and 100 degrees Fahrenheit. PROTECT FROM FREEZING. Shelf life is 18 months when properly stored.

Ecologic<sup>TM</sup> Acrylic Latex Additive is sold in one and five gallon containers.

## **Coverage**

For a 15% dilution to 85% water, one gallon of Ecologic<sup>TM</sup> Acrylic Latex Additive will produce 6.75 gallons of modified mixing water for lime based mortars.

When used as a bonding agent at full strength, one gallon of Ecologic<sup>TM</sup> Acrylic Latex Additive will cover approximately 250-300 square feet over dense concrete or masonry, or 150-200 square feet over concrete block or brick.

# **Safety**

Harmful if swallowed. If swallowed, induce vomiting and call physician immediately. May cause irritation to eyes and skin. Avoid contact. In case of skin contact wash affected area with soap and water. In case of eye contact, flush with water for 15 minutes and get prompt medical attention. The use of impervious rubber gloves and goggles is recommended when handling. Use with adequate ventilation and avoid breathing vapors and spray mist. Can cause irritation of the nose, throat and lungs. Keep out of reach of children.

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### **Contact**

Lime *Works*.us 3145 State Road, Telford, PA 18969 www.Lime *Works*.us Technical help phone: 215-536-6706

Fax number: 215-453-1310 E-mail: info@LimeWorks.us