



Better Concrete Happens on DAY1

PERFORMANCE SPECIFICATION FOR CONCRETE PLACING USING THE LYTHIC DAY1 SYSTEM –

This specification is provided as a service and is intended to be used as a guideline for preparing the appropriate project specific specification sections.

Product Description

Lythic DAY1 Troweling Aid, Densifier and Curing Agent is a **Colloidal Silica**-based topical additive that reacts with the cement matrix as it is forming.

Equipment

Apply **Lythic DAY1** using a low-pressure pump sprayer. Automatic low pressure sprayers can also be used for larger projects.

Pre Application

Any adjacent areas, surfaces, or objects not intended to be treated with **Lythic DAY1** should be protected from over-spray or drift with plastic sheeting or other proven protective material. Mix an appropriate quantity of **Lythic DAY1** for job-size, per instructions.

Project Testing

FINISHING AID: Since every batch of concrete is unique, and its behavior varies depending on surrounding conditions, testing is only relevant on the actual batch being finished. At the beginning of floating, and again at the beginning of troweling, test **Lythic DAY1** on a small sample section to verify needed application rate and technique.

Application Guidelines

1- Agitate **Lythic DAY1** RTU mixture before use. When mixing concentrate follow dilution instructions.

2- Automatic low pressure sprayers can be used for larger projects. Keep the sprayer at optimized levels, allowing even distribution when applying to concrete surface.

3- Spray apply **Lythic DAY1** to concrete surface immediately after the concrete has been **leveled** or as soon as possible in the floating or troweling stage. Hold spray tip (*30-60cm*) above surface and moving in a circular motion to achieve even distribution. Apply DAY1 to sufficiently "wet" the surface while not allowing puddling.

Lythic DAY1 is not a topical curing compound it must be worked into the concrete for optimal results.

When immediate application is not possible, apply within three hours of initial concrete placement for optimum concrete performance.

*A second application may be required if adverse conditions such as hot sun and wind and a very fast drying surface and should be mist applied ahead of the power trowel.

Finisher should determine when additional **Lythic DAY1** is needed to improve workability.

Lythic DAY1 must be worked into the surface of the concrete and or the dry-shake-hardener/ color hardener.

4- Apply so as to maintain a wet edge.

5- Do not apply water to the surface.

6- Multiple applications can be made as needed, as long as the combined total of all colloidal silica applications is no greater than (3.7 m²/L) RTU mixture.



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Lythic DAY1 results are optimized when supported by good concrete placement techniques.

Lythic DAY1 can be applied as required to improve the workability of the concrete surface. It is recommended to apply **Lythic DAY1** throughout the entire project for most consistent results. **Lythic DAY1** can be applied both before and after the application of dry-shake-hardeners/color hardeners, and may be especially useful when there is a limited amount of bleed- water to wet-out the powdered hardeners.

Lythic DAY1 performance and third party testing are based on typical concrete mix designs. **Lythic DAY1** reacts with calcium hydroxide ($\text{Ca}(\text{OH})_2$), that is present in concrete as a byproduct of Portland cement hydration. High performance concretes often include alternative (non-Portland) cements that have different chemical characteristics; additional jobsite samples should be carried out for performance review.

Lythic DAY1 can be used in conjunction with:

- Lythic Densifier**(Standard colloidal silica densifier)
- Lythic Densifier XL**(Larger particle densifier)
- Lythic Protector**(Color enhancer & stain reducer)
- Lythic SPD Protector**(Color enhancer & stain protection)
- Lythic Cleaner**(Colloidal silica cleaning agent)

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