POWER PREP LC

LOW CARBON SLAB PRE-TREATMENT

LOW-CARBON
CONCRETE SOLUTION

Faster Slab Hardness, Ensures Maximum Densification!

Product Description

PowerPrep LC™ is a slab pre-treatment which restores critical properties in low-carbon concrete, including those with reduced or zero cement content. By restoring the concrete matrix, PowerPrep LC enables the slab to attain its intended hardness quicker, and further enhances its strength when densified with chemical densifiers like **Ashford Formula**™ or **RetroPlate®**.

Why Choose PowerPrep LC?

PowerPrep LC, when paired with Ashford Formula or RetroPlate, ensures low-carbon and Type 1L concrete achieves its intended hardness efficiently, overcoming the slower strength gains common in these mix designs. This combination accelerates the hardening process to meet critical benchmarks, such as achieving a Mohs hardness level of 4+ for polishing and providing a durable surface capable of withstanding heavy equipment and resisting damage from ongoing construction activities.

KEY BENEFITS

PowerPrep LC must be paired with Ashford Formula or RetroPlate to deliver the following benefits:

- **Accelerates Slab Strength and Enhances Performance:** Works synergistically with Ashford Formula or RetroPlate to ensure low-carbon and Type 1L concrete achieves expected hardness more quickly, overcoming slower strength gains and optimizing slab performance.
- **Achieves Hardness Benchmarks:** Helps slabs quickly reach a surface hardness of Mohs level 4+, critical for polishing processes.
- **Protects Floor from Damage:** Strengthens slabs to withstand heavy construction equipment and trades, reducing surface damage risks.
- **Prevents Project Delays:** Ensures slabs are ready for subsequent operations, avoiding setbacks caused by slower hardening.
- **Supports Green Construction Goals:** Enables low-carbon concrete to perform comparably to OPC concrete, balancing sustainability with functionality.
- **Peace of Mind for Stakeholders:** Ensures concrete performance expectations are met while preventing costly setbacks.

LIMITATIONS

- PowerPrep LC has been rigorously tested and validated exclusively with Ashford Formula and RetroPlate, ensuring superior performance with these densifiers.

Technical Info

Form:	Whitish liquid
Odor:	Slight odor
Flash Point:	320 °F (160 °C)
Freezing:	Do not allow to freeze
pH:	10.96
Packaging:	1 gal (3.79 L) Jug 5 gal (18.9 L) Pail 55 gal (208 L) Drum
Storage:	6 months; store indoors
Coverage:	160-200 ft²/gal 4-5 m²/L
VOC:	No VOCs

Ensuring Concrete Hardness and Slab Readiness

PowerPrep LC offers contractors a powerful solution to achieve maximum densification by enhancing the chemistry within low-carbon concrete, increasing the volume of densification sites, and reaching—or even exceeding—the desired hardness typically expected from OPC when paired with Ashford Formula or RetroPlate. **Average testing at 14 days has yielded a 7.5 Mohs hardness from a starting point of 3**, proving how pre-treating with PowerPrep LC maximizes the densification, performance, and durability of low-carbon concrete.

Performing a Mohs Hardness Test (scratch test) on low-carbon concrete floors before and after applying PowerPrep LC and a chemical densifier is an essential quality control step. The test helps assess the slab's initial condition and confirms the effectiveness of the application.

To learn how to properly perform a Mohs Hardness Test, please scan the code to watch the video.

How to Perform a Mohs Hardness Test

Application Instructions

Surface Preparation
Ensure the surface is clean and free of debris by using **CreteClean Plus with Scar Guard**™ to prepare the floor properly for treatment. Perform a scratch test in multiple locations to gauge the initial surface hardness of the concrete.

Product Preparation
The product is shipped ready to use and should not be diluted. Thoroughly agitate before use.

Flood Coat Application
Apply a flood coat at a coverage rate of **200 ft²/gal (5 m²/L)** and allow the product to dwell on the surface for a minimum of 30 minutes. If the slab absorbs all the product, lightly mist the area with more product or water to keep it wet.

Use brooms to agitate the product, ensuring even distribution across the surface. Be sure to prevent the surface from drying out throughout the process.

Product Removal
A quick scrub is needed to remove excess material. Use squeegees, a squeegee vacuum, or an auto scrubber for removal. If necessary, use ONLY water (no cleaning chemicals) to prevent streaking. Avoid performing any additional cleaning steps. Allow the floor to dry for at least 2 hours before densifying.

Densifier Application
After 2 hours, or when the surface appears dry, apply Ashford Formula or RetroPlate immediately to the surface using the flood coat method at a coverage rate of **200 ft²/gal (5 m²/L)**. For detailed application instructions, please scan the codes to watch the respective densifier application videos.

Ashford Formula Densifier Application

RetroPlate Densifier Application

Post Treatment Cleaning & Testing
To enhance the reaction and accelerate the time needed to achieve optimal surface hardness, perform daily cleanings using CreteClean Plus with Scar Guard for at least five consecutive days. Once complete, retest the floor surface in multiple areas to confirm the improved hardness.

Applying PowerPrep LC When Using Ashford Formula as a Cure on Low-Carbon (or Any) Concrete
Apply PowerPrep LC during the same phase typically used for applying Ashford Formula as a curing agent. After a minimum of 2 hours, or once the floor appears dry, apply Ashford Formula. This process accelerates densification, achieving maximum hardness sooner than would be achieved by Ashford Formula alone.

Applying PowerPrep LC When Polishing New Low-Carbon Concrete Floors
Before grinding, conduct a scratch test to confirm the concrete has reached Mohs 4+ hardness. If the hardness is below a Mohs 4, pre-densify the floor with PowerPrep LC, then Ashford Formula or RetroPlate at least two hours later, or once dry. Re-test the floor after approximately 5 days, or sooner, to confirm Mohs 4+ hardness.

For heavier grinds, apply PowerPrep LC and RetroPlate (2 hours apart) during the typical densification phase. For lighter grinds, densifying with RetroPlate alone is sufficient if pre-densification with PowerPrep LC and Ashford Formula or RetroPlate was completed. If not, apply PowerPrep LC during the densification phase with RetroPlate, 2 hours apart.

Maintenance

Continued cleaning and routine maintenance with CreteClean Plus with Scar Guard is critical for the long-term durability and lifelong performance of the floor. Each cleaning serves an important purpose: enhancing and maintaining the floor's natural shine, fortifying the surface, and helping heal minor surface blemishes and scratches, ensuring lasting resilience and performance.

Technical Assistance & SDS

Technical Services & Emergency Contact
Contact Curecrete at **(801) 489-5663** or toll free at **(800) 998-5664** or by email at **techsupport@curecrete.com.** **For emergency information, call (801) 629-0667.**

Safety Data Sheet
For SDS information, scan the code provided.

Safety Data Sheet (SDS)

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