

CreteDefender P2™ (“Permanent Protection”) Tech Data Sheet

Product Description:

CreteDefender P2™ is a water-carried concrete treatment that chemically reacts with the free lime in concrete to penetrate the pore and capillary structure.

It permanently seals and protects concrete from salts, freeze/thaw cycles, sulfates, chloride ions, and water. It never needs to be re-applied during the concrete’s lifetime.

Key Features & Benefits:

CreteDefender P2 will permanently:

- Seal and protect concrete from damage caused by water and salt.
- Prevent freeze/thaw damage.
- Restore older concrete’s pH.
- Eliminate dusting and flaking.
- Resist stains and damage from chemical spills.
- Prevent damage from sulfates and acid rain.
- Harden and increase the abrasion resistance.

Recommended Uses:

Use CreteDefender P2 on portland cement-based concrete, with a minimum compressive strength of 4000psi (28 MPa), and a water to cement ratio between .36:1 and .50:1. It can be applied any time after the concrete is set, on interior or exterior concrete, horizontal or vertical, old or new, broom finished or machine troweled. CreteDefender P2 will not work on non-cementitious materials, CMU’s, block, brick, or pervious concrete. It is not compatible with acid stained concrete.

Application:

Spray or directly pour CreteDefender P2 onto clean, dry concrete. All sealers and coatings, if any, must be removed from the concrete before applying P2. Crete-

Product Data		
Package Sizes:	5 gallon Pail 55 gallon Drum	
Weight:	Pail - 54 lbs./24.5 kg Drum - 530 lbs./243 kg, and bulk tote	
Specific Gravity:	1.07 to 1.09 @ 20°C	
Freezing Point:	30°F/ -1°C	
PH:	11.3	
Protect from Freezing:	Yes	
VOC’s:	None (ASTM-D2369)	
Appearance & Odor:	Colorless, turbid liquid. No odor to slightly soapy odor.	
Flammable:	No	
DOT Hazard Class:	None	
Hazards:	Health: 2 (Acute)	
<i>Irritating to the eyes, skin, and mucous membranes. Do not ingest.</i>		
Mixing:	<u>DO NOT MIX OR DILUTE</u>	
Coverage:	75 - 225.ft ² /gallon/application 1.9 - 5.75 m ² /liter/application See Coverage notes	
Drying time:	2-10 hours	
Drying time between applications:	Minimum of 2 hours. Surface must be dry.	
Drying time before paint/coatings:	24 hours	
Initial Cure:	24 hours	
Complete Cure:	75 Days	
Shelf Life:	2 years, unopened	
Test	Method	Result
H2O Absorption	ASTM-C642	.33% by weight
Scaling/freeze-thaw	ASTM-C672	Zero (0)
Abrasion Resistance	ASTM-C779	+45%
Freeze/thaw	ASTM-C666	99.4df
Chlorides	AASHTO-T259	.013% @ 25mm
Chlorides	ASTM-C1202	61% reduction

Defender P2 must not be applied if rain is expected within 24 hours of application. Avoid contact with aluminum or glass.

CreteDefender P2 must be applied using a method that saturates the concrete for 20-30 minutes. Any puddles or ponding must be removed from the concrete using a squeegee or stiff broom, moving the material onto drier areas until there is no standing material on the surface of the concrete. On machine troweled concrete, use bristle brooms or mechanical scrubbing machines to agitate the concrete until

CreteDefender P2 starts to react and become slippery, which may take up to 40 minutes. Then, remove the excess P2 with a squeegee, mop, or scrubbing machine.

Two applications are required for all exterior concrete. One application is needed for interior, machine troweled concrete. A minimum of 2 hours is required between applications, with the concrete becoming visibly dry between applications. Depending on the porosity of the concrete or the anticipated constant exposure to salt, additional applications may be required.

Concrete treated with Crete-Defender P2 is compatible with paints and other coatings. Wait 24 hours after applying Crete-Defender P2, wash the surface with water and allow to dry before applying other paint or coatings.

Coverage:

Coverage rates are dependent upon the porosity of the concrete and weather conditions. Coverage rates will be better when applied out of direct sunlight during the coolest part of the day. Early morning or at night are best.

For estimating purposes, CreteDefender P2 generally averages 75-150 square feet per gallon (3 meters/liter) per application for exterior, broom-finished concrete, and 150-225 square feet per gallon for interior, machine troweled. The amount you use may be significantly more or less, depending on weather and porosity.

You are not applying a membrane, coating or water repellent. CreteDefender P2 is a reactive chemical. Application process is critical to success.

Warranty: CreteDefender carries a 20 year limited product warranty.