

MasterSeal[®] 630

Reactive methacrylate resin for sealing cracks and concrete decks

FORMERLY DEGADECK[®] CSP

PACKAGING

MasterSeal 630 is sold by weight and packaged in 38 lb (17.3 kg) pails and 396 lb (180 kg) drums. This is equivalent to 4.7 gallons (17.8 L) and 49 gallons (185.5 L) respectively.

MasterSeal 918FS:
2.5 lb bottle or 50 lb box

COLOR

Clear

YIELD

MasterSeal 630: 100 ft²/gal (2.5 m²/L), depending on number and volume of cracks as well as porosity of concrete.

MasterSeal 918FS: see mixing charts for the appropriate products.

STORAGE

Store in cool, clean, dry area. Keep out of direct sunlight. Storage temperature is 60°F–80°F (15–27° C). Store in original and unopened container.

SHELF LIFE

2 years when properly stored

VOC CONTENT

MasterSeal 630: 70 g/L less water and exempt solvents

MasterSeal 918FS: 0 g/L less water and exempt solvents when components are mixed and applied per manufacturer's instructions

DESCRIPTION

MasterSeal 630 is a very low viscosity, low surface tension, solvent-free, rapid curing reactive methacrylate resin formulated to penetrate, repair and seal cracks in concrete substrates.

MasterSeal 918FS is 50% dibenzoyl peroxide (BPO) in granulated powder form to initiate the cure of the resin.

PRODUCT HIGHLIGHTS

- Fast curing (1 hour), making MasterSeal 630 effective on highway and bridge projects, allowing for fast return of traffic flow, contributing directly to worker and driver safety
- UV resistance so exposure to sunlight does not affect product performance
- Weather resistant, providing long-lasting service life
- Two-component formula makes MasterSeal 630 easy to install and shelf life stable
- Protects against water and chloride ion ingress to prevent premature deterioration
- Can be used at temperatures ranging from 40° to 104° F (5° to 40° C), extending application season
- Penetrating flood coat sealer to prevent moisture and ion ingress into substrate

APPLICATIONS

- Exterior
- Horizontal
- Concrete
- Bridge decks
- Parking structures
- Infrastructure

HOW TO APPLY

SURFACE PREPARATION

1. Inspect the concrete substrate before preparation. Note the location of surface cracks and the presence of contaminants. Concrete surfaces must be dry and free of dust, dirt, oil, wax, curing compounds, efflorescence, laitance, and all other bond breaking materials.
2. Inspect the underside of the deck for signs of leakage due to full depth cracks.
3. Check weather forecast to ensure dry conditions. Wet substrates must be allowed to dry prior to beginning work.
4. Using a dust-free, mobile shotblaster or gritblaster, brush-blast the substrate to expose surface cracking.
5. Do not use wet preparation methods.
6. Perform a second inspection, noting newly-found surface cracks. Mark these for pre-treatment. Clean out cracks and the deck surface with oil-free compressed air.

Technical Data

Composition

MasterSeal 630 is a reactive methacrylate resin.

Compliances

- MasterSeal 630 is classified under DOT regulations as Resin Solution, UN 1866, Class 3, PG II.

Test Data

PROPERTY	RESULTS	TEST METHOD
Hardness, Shore A	28	ASTM C 661
100% modulus, psi (MPa)	39 (0.24)	ASTM D 412
Appearance	Liquid	
Specific gravity	0.97	ASTM D 4669
Viscosity, cP (mPa-sec), at 73° F (23° C)	5-15	ASTM D 2393
Flash point, ° F (° C)	50 (10)	ASTM D 3278
Tensile strength, psi (MPa)	7,775 (54)	ASTM D 638
Compressive, psi (MPa)	12,800 (88.2)	ASTM D 638
Flexural Strength, psi (MPa)	11,900 (82)	ASTM D 638
Elongation at break, %	5	ASTM D 638

MIXING

MasterSeal 630 must be mixed with the appropriate amount of MasterSeal 918FS just prior to application. Air/substrate temperature determines the amount as follows:

MASTERSEAL 630 (1 GALLON)

TEMPERATURE ° F (° C)	VOLUME OUNCES
41 (5)	11
50 (10)	8.5
59 (15)	6.5
68 (20)	4
86 (30)	2

* Please consult Master Builders Solutions Technical Services for applications outside this temperature range.

APPLICATION

1. MasterSeal 630 is applied as a flood coat in a gravity-fed process by broom or roller.
2. The contents of the mixed batch should be immediately poured onto the substrate and worked into cracks by distributing with ½" to ¾" (13–20 mm) nap solvent grade rollers or broom. Do not allow material to pond. Application rate is 100 ft²/gal (2.5 m²/L).
3. Do not allow the mixed batch to remain in the mixing vessel. It is advisable to randomly broadcast a 30 mesh (600 µm), dry aggregate into the wet, uncured resin at the rate of approximately 4 lb/100 ft² (200 g/m²).
4. Working time for MasterSeal 630 is between 10 and 15 minutes once it has been applied to the substrate. Full cure to specification will be between 45 minutes and 1 hour.

PRE-TREAT WIDE CRACKS

Cracks over ⅛" (3 mm) should be treated individually prior to deck application. Full depth cracks may require alternative treatment to prevent runoff of resin. Fill wider cracks with dry 30 mesh silica sand. Mix a small amount of MasterSeal 630, pour into cracks and distribute with a paint brush. Squeeze bottles can also be used.

DRYING TIME

Allow one hour for MasterSeal 630 to gain full mechanical properties. Check for dry-to-touch condition. End result should be a darker-colored, matte finish with a minimal surface film and some loose broadcast aggregate.

CLEAN UP

Clean tools as needed with inhibited MMA, acetone, ethyl acetate or similar solvents.

FOR BEST PERFORMANCE

- Application temperature range of substrate is between 40 and 104° F (5 and 40° C).
- DO NOT use for vertical surface treatments.
- MasterSeal 630 is a sacrificial film that will wear out over time. However, the cracks will continue to be protected.
- Periodically inspect the applied material and repair localized areas as needed. Consult a Master Builders Solutions representative for additional information.
- Proper application is the responsibility of the user. Field visits by Master Builders Solutions personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting www.master-builders-solutions.com/en-us, e-mailing your request to mbsbscst@mbcc-group.com or calling 1(800)433-9517. Use only as directed.

IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.

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