TRI-CHEM

TECHNICAL DATA SHEET

QUICK FREEZER SEAL

Fast Concrete Repair

DESCRIPTION

Quick Freezer Seal is a two-component polymer for industrial repairing of spalled concrete, holes, cracks, and thresholds, or uneven concrete slabs. Quick Freezer Seal is not recommended for expansion joints.

PACKAGING & COVERAGE

2-gallon kit or a 10-gallon kit. Coverage is 320 sq. ft. at 5 mils per gallon (640 sq. ft. for a 2-gallon kit and 3200 sq. ft. for a 10-gallon kit)

CURE SCHEDULE

Pot life (100-gram mass)	1-4 minutes @ 70°F
Recoat or topcoat	1 hour @ 70°F
Light foot traffic	10-20 minutes @ 70°F
Heavy traffic	1 hours @ 70°F

PROPERTIES

Solids by Weight	Nearly 100% cured
Volatile Organic Content	5.5 grams per liter cured
Standard Colors	Gray/green colored when mixed and cured. The gray color will not develop until the curing process takes place.
Recommended Thickness	Can be applied at variable thicknesses with use of dry sand and aggregate.
Coverage per Unit	Dependent on hole size and amount of aggregate
Packaging	2x1 gallon kit, or 2x5 gallon kit
Mix Ratio	1:1 by volume
Shelf Life	1 year in unopened containers
Shore D Hardness	71
Tensile Strength	4,500 psi
Elongation	5-6%
Impact Resistance	Excellent
Abrasion Resistance	Excellent
Compressive Strength	3,800 (NEAT) or 9,000 (WITH SAND)
Bond Strength	535 psi (concrete failure)
Dot Classification	Part A & B "not regulated"
Viscosity	9 CPS
Shrinkage and Exudation	None
Application Temperature	20-90°F (lower temperatures require additional cure time)

TOPCOAT

None required. However, many types of products can be used as coatings or overlays for the area that has been patched.

LIMITATIONS

- Because of the quick cure time for this product, it is best to work with one small area at a time. If the material can stand for more than 1-2 minutes after initial use, then the material in the static mixing nozzle will cure. If the material in the mixing nozzle is allowed to cure, then the nozzle must be removed and a new nozzle attached. The material in the individual tubes are unaffected by the curing of the product in the nozzle.
- Color stability may be affected by environmental conditions such as UV light, high humidity or chemical exposure. Product may discolor if exposed to certain types of light such as Sodium vapor lighting.
- Final cured product colors may vary from batch to batch and be influenced the by silica aggregate when used.
- Substrate temperature must be 50 F above dew point.
- All new concrete must be cured for at least 30 days prior to application. When applying material in cold areas, make sure the surface is clean and dry. Also, it is best to keep the material and aggregate sand at normal room temperature.
- Test data based on neat resin unless otherwise noted.
- Physical properties are typical values and not specifications.

HOW TO USE

Surface Cracks (all depths and widths): Cracks should be free of dirt, oils, dust, latents and old crack repair materials. All surfaces must be clean and dry. New concrete must be fully cured. A dry diamond blade attached to an electric hand grinder is recommended for preparing cracks and creating a clean surface to aid bonding. A wire brush or twisted wire wheel on a grinder may be used in some cases.

Surface Spalls and Deflections: Remove all loose materials back to sound concrete with a chisel or light chipper. Do Not Square Cut the Repair Area. If a square appearance is necessary, lightly score surface and remove material. Use a wire brush or twisted wire wheel to clean the repair are. All surfaces must be free of dirt, oils, dust, latents and old repair materials. For feather edge repairs in high traffic areas score the repair edge with a dry diamond blade 1/8" deep around the perimeter of the repair. New concrete must be fully cured.

Application Temperature: Recommended application temperature is between 0°F and 100°F (-18° to 38°C). It is best to keep material at room temperature (60° to 80°F) prior to application. If manufactured sand is to be used with product, it should also be kept at room temperature. Quick FREEZER SEAL will fully cure in 10 minutes at 72°F (22°C). The temperature of the material and the temperature of the concrete surfaces will affect cure time; warmer temperatures will decrease cure time and cooler temperatures will increase cure time.

Mixing: Due to the rapid setting nature of Quick Freezer Seal, pot mixing of the components is not recommended for crack and joint repairs less than ¾" in width. Combine equal parts of A and B. Mix with a drill mixer or hand mixing stick for 30 seconds or until well blended. Pour into the repair area immediately.