

# QUARTZ FLOOR HARDENER

Non-metallic Quartz dry-shake floor hardener



## DESCRIPTION

QUARTZ FLOOR HARDENER is a mixture of finely graded nonmetallic Quartz aggregates, plasticizer and cement binder. It is an economical concrete floor hardener recommended for both interior and exterior use. When applied at the proper point in the concrete setting cycle, QUARTZ FLOOR HARDENER is worked into the concrete to become an integral part of the floor to provide a surface which is highly resistant to abrasion. QUARTZ FLOOR HARDENER is available in a natural concrete color in addition to a variety of other colors, including Light Reflective, Tile Red, French Gray, Battleship Gray and Nile Green.

## FEATURES/BENEFITS

- Increases impact and abrasion resistance up to four times that of plain concrete
- Provides a high density surface that resists liquid penetration and is easy to clean and maintain
- Minimal surface dusting
- Exterior/interior application
- Non-fading, non-rusting colors, (Light Reflective, Tile Red, French Gray, Battleship Gray and Nile Green)

## SPECIFICATIONS/COMPLIANCES

U.S.D.A. accepted for use in facilities where incidental contact with food product is possible.  
Compliant with American Concrete Institute Standards: ACI 302, ACI 305, ACI 306

## APPLICATION

**Coverage:** 0.5 to 1.5 lbs per sq. ft.  
(Recommended minimum application rate for colored hardeners is 1.5 lb per sq-ft)

As a general guide to floor and slab construction, refer to American Concrete Institute Standard 302.

All work should be done under roof if at all possible. Job conditions that affect drying/setting time also affect the hardener application time. Use experienced workers for the job size. For most applications, a mechanical spreader that drops the dry shake directly onto the fresh concrete is recommended.

**Preparation:** Calculate the number of bags required for a given area as per the coverage rate required. Place concrete to finish grade level and compact with a wooden bull float.

**Special Conditions:** When slab is subjected to any condition that causes rapid surface drying such as low humidity, wind, sunlight, etc., spray **SpecFilm** onto surface just after bull floating.

**Placing:** Application of the hardener depends on: slump of concrete, job site conditions affecting drying, and the coverage of the hardener. Perimeter sets quicker than interior. Be aware of this and apply to edges first.

Dry-shake surface hardeners are designed to be placed after bleeding. After concrete has been screeded, tamped and floated, apply  $\frac{2}{3}$  of coverage ratio on first application. Allow the dry-shake to darken, absorbing the moisture from the slab, then wood bull float or machine at the appropriate time. Immediately follow with the remaining  $\frac{1}{3}$  and machine float. Final finish after the slab stiffens.

To achieve maximum appearance and performance, float and finish the dry-shake so as to maintain the material on the top surface of the slab, fully integrated into the base concrete.

Edges should be worked by hand, keeping trowel as flat as possible. Blistering can occur when trowel blades have been raised too early. Re-trowel with blades lowered to remove blisters.

DO NOT ADD WATER to aid in finishing. This will weaken the surface. A hard troweled surface is recommended.

**Curing:** Apply an approved SpecChem ASTM C-309 compliant curing compound after final troweling.

## TYPICAL TEST DATA

Comprehensive Strength ASTM C109 (mixed w/ 10% water)	
1 Day	5,500 psi
2 Day	9,500 psi
28 Day	12,000 psi

Relative Abrasion Resistance ASTM C779		
28 Days	30 Min	60 Min
	.01 inches	.03 inches



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## PACKAGING

50 lb triple lined bag (22.7 kg)

## SHELF LIFE

Shelf life of unopened bags stored in a dry facility is 12 months. Excessive temperature differential and/or high humidity can shorten the shelf life expectancy. Store in a cool, dry area away from direct sunlight.

## LIMITATIONS/PRECAUTIONS

- DO NOT place at temperatures below 40°F (5°C) or if the temperature is expected to fall below 40°F (5°C) in the next 24 hour period.
- DO NOT use dry-shake hardeners where floor will be exposed to any material known to attack Portland cement, such as acid.
- Slump should not exceed 4" (10.16 cm)
- DO NOT use any air entrainment. Total air in concrete mix should not exceed 3%.
- DO NOT use calcium chloride or aggregates contaminated by salt water.

*Caution:* Contains Portland cement and sand. Cement will cause irritation. Avoid contact. A dust respirator, safety goggles, and rubber gloves are recommended. Avoid prolonged contact with clothing. In case of contact with eyes, immediately flush with water for at least 15 minutes. Get prompt medical attention. Do not wear contact lenses when working with this product. DO NOT take internally. Keep out of reach of children.

Avoid hazards by following all precautions found in the Material Safety Data Sheet (MSDS), on product labels and in technical literature. Please read this information prior to using the product.

**DO NOT EXPOSE TO OR APPLY NEAR FIRE OR FLAMES. FOR WELL VENTILATED OR EXTERIOR USE ONLY!**

## WARRANTY

### NOTICE-READ CAREFULLY CONDITIONS OF SALE

SpecChem offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of SpecChem. No other representative of or for SpecChem is authorized to grant any warranty or to waive limitation of liability set forth below.

### WARRANTY LIMITATION

SpecChem warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, SpecChem will replace the defective product with new product without charge to the purchaser. SpecChem makes no other warranty, either expressed or implied, concerning this product. There is no warranty of merchantability. NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE PURCHASE PRICE OF THE PRODUCT IN RESPECT OF WHICH DAMAGES ARE CLAIMED.

### INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.



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