



TECHNICAL DATA SHEET

Permaquik® 200 Crystalline Waterproofing

Capillary Waterproofing Formulation

PRODUCT DESCRIPTION

Permaquik® 200 Crystalline Waterproofing is a capillary waterproofing formulation of proprietary blends of chemicals, quartz sand, and cement. The chemicals contained in the crystalline waterproofing materials require the presence of moisture to set off a chemical reaction from within the matrix of the concrete. When combined with "free lime", these chemicals form long chained complexes, which crystallize and penetrate deeply into the capillaries of the concrete, eliminating the migration of water. Independent tests show penetration of up to 2" (51 mm) in 28 days.

The crystalline process is continuous as long as moisture is present in the concrete, significantly reducing the concrete's natural porosity by filling small voids and cracks caused by shrinkage. The concrete is still able to breath as the crystalline does not create a vapor barrier. If no moisture is present, the crystals will lie dormant until moisture reappears and then will reactivate to seal the cause of the leakage. Permaquik 200 is applied as a slurry coat on vertical interior (CIP) concrete or (CMU) block structures to create a waterproofing barrier from within the substrate. It can be applied by "broadcasting" the dry powder onto horizontal concrete surfaces at the time of initial set and power - or hand - floating the powder to into the green concrete.

Once the reaction has taken place and the formulation has crystallized, these coatings are highly resistant to salts (chloride penetration), alkalis, and seawater. Because of the density of the crystalline chain, the concrete is able to withstand mildly acidic conditions to provide protection in wastewater treatment plants as well as superior protection against frost damage and may also be used in sealing the joint between new and existing concrete.

BASIC USES

Few products in the waterproofing industry offer the total protection to the concrete itself that Permaquik 200 provides. Where moisture is present, there is always the danger of damage not only to the concrete but also to the steel as well as interior finishes. No special below-grade protection is necessary.

Permaquik 200 is used for negative side waterproofing in conjunction with a positive side membrane. For positive side waterproofing, consult your local Tremco Sales Representative.

Permaquik 200 provides fast, economical waterproofing for foundation walls and floor slabs, suspended or in-ground pools, and protects against spalling due to oil, salt, and freeze/thaw action in parking garage floor applications.

FEATURES & BENEFITS

- When applied to inside surfaces, Permaquik 200 integrates and combines with the concrete from within, thus forming a barrier which cannot easily be damaged.
- The crystalline products tolerate water so there is no need to continually dry the surface before application, unlike most asphaltic, bitumen, or solvent based resin systems.

AVAILABILITY

Immediately available from your local Tremco Sales Representative or Tremco Distributor. For distributor locations, visit www.tremcosealants.com

COVERAGE RATES

1.3 kg/M² or 2.4 lb/yd²

200 ft² (18.6 M²) per pail in 2 passes

Horizontal dry shake method: 1 kg/M² or 1.85 lb/yd²

PACKAGING

Permaquik 200: 55 lb (25 kg) packed in 5-gal (20-L) pails. Also available in drums.

COLORS

Gray

LIMITATIONS

- Freshly applied crystalline waterproofing systems contain water and they must not be exposed to freezing temperatures. At the other extreme, the systems must be protected from drying out too quickly in hot or windy conditions.
- Avoid prolonged contact with the skin. To minimize risk of irritation from these alkaline materials, use rubber gloves.
- Do not mix with latex modified or hydraulic cement mortars.
- Do not paint surfaces treated with Permaquik 200 until 21 days after application, and first apply muriatic acid and water (1:5) to neutralize the surface chemicals.
- Not for use in potable water applications.
- Do not use on exterior walls.

WARRANTY

A repair or replacement warranty is available on all Tremco products. Visit <https://www.tremcosealants.com/warranties/> for details.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	DESCRIPTION	
Type	Crystalline Waterproofing	
Color	Grey	
Solids	1	
Application	Brush	
Thickness	2.4 lb/yd ² (1.3 kg/M ²)	
PROPERTY	TEST METHOD	TYPICAL VALUES
Maximum VOC	Method 310	0 g/L
Flash Point	ASTM D92 Minimum 500 °F (260 °C)	
Compressive Strength	ASTM C39	3 Days 4145 psi (2857.87 N/cm ²) 7 Days 5560 psi (2833.48 N/cm ²) 28 Days 6970 psi (4805.64 N/cm ²)
Water Permeability	ASTM D5084	6.6 x 10 ⁻¹² cm/sec
Water Vapor Transmission	ASTM E96	0.012 perms
Hydrostatic Pressure		100' (28 M)

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

PQ200DS/1122

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