



## RapidShield™ 0007 Clear

### Application

RapidShield™ 0007 Clear is a high gloss 100% solid, UV curing, permanent industrial floor coating intended for use on concrete floors. The RapidShield™ product range is cured using proprietary Quaker UV curing units.

RapidShield™ 0007 Clear is formulated using only reactive 100% solids materials in order to conform to LEED Guidelines and is NSF Registered for Non-Food Compounds R2 Category.

### Product Suitability

RapidShield™ 0007 Clear is used as both a sealer/primer coat on freshly prepared concrete and as a final top coat over top of itself or RapidShield™ Colors. RapidShield™ Colors are applied directly to

RapidShield™ 0007 Clear (applied as a primer/sealer) for purposes such as demarcation lines, designation of safety areas, truck traffic ways and walkways.

RapidShield™ 0007 Clear is then applied as a topcoat over RapidShield™ Colors or RapidShield™ 0008 High Build, applied as a sealer/primer, in order to provide optimum cleaning and durability. RapidShield™ 0007 Clear may also be used as a dust sealer coat (one coat only) on power float floors. RapidShield™ 0007 Clear is designed to provide a light to medium duty, high gloss, easily cleaned surface in industrial environments.

Tire marks left by fork lift truck traffic are easily removed. It is suitable for use in industrial workshops, production warehouses, processing areas, retail stores, etc.

Property	Test Method	Typical Value
Typical Properties - Product as Received		
Appearance	GTM 2240	Clear Amber liquid
Specific Gravity	GTM 1510	1.08 +/- .02
Viscosity (#3 Zahn S90)	GTM 1626	20+/- 5 s @ 77°F
VOC	Calculated	0 lbs/gal
Solids (100%)	N/A	100% wt
Recommended Thickness	N/A	4-6 mils
Coverage	N/A	267 - 400 ft <sup>2</sup> /gal
Typical Properties - Cured Film (at 4-6 mils)		
Appearance	GTM 2240	Clear Film
MEK Resistance*	ASTM D 5402	>200 Double Rubs
Pencil Hardness	ASTM D 3363	>4H
Gloss (at 60° observation)	ASTM D 523 - 08	>80 Gloss Units
Intercoat Adhesion**	ISO 2409, ASTM D3359	100% Adhesion
Adhesion to Concrete (when used as primer)	EN 1542, ASTM D 4541-2	>580 psi
Permeability to Water Vapor	ISO 7783-1 & -2	0.06 lb/ft <sup>2</sup>
Pendulum Slip Resistance (dry)	BS 7976-1:2002	>55 PTV
Coefficient of Friction (for lb-f)	ASTM D 1894-08, ASTM F 609-05, ASTM C 1028-07	>= 0.65
Abrasion Resistance (1000 cycles, C17, 1000 g)	ISO 5470-1	<75 mg wt. loss
Coefficient of Thermal Expansion	EN 1770, ASTM C 531	1.67 x 10 <sup>-4</sup> in./in. °R <sup>-1</sup>

\* Refer to our Chemical Resistance Sheet for additional information.

\*\* on top of properly applied and cured RapidShield™ Colors, RapidShield™ 0008 HighBuild and RapidShield™ 0007 applied as a primer



## RapidShield™ 0007 Clear

### Benefits

- VOC compliant (<50 g/l)
- Ideal for low temperature applications
- Excellent cleaning
- Instant curing
- High gloss film
- Excellent wear resistance

### Slip Resistance

RapidShield™ 0007 Clear meets the requirements of OSHA for flat surfaces. To increase slip resistance, a fine-to-medium textured finish can be achieved by the use of specific fine aggregates. During the final top coat application and prior to UV curing, an aggregate can be scattered and back rolled into the wet surface thereby encapsulating the aggregate in the coating upon cure. The size and quantity of aggregate, as well as the top coat film build, will affect the non-slip properties of the final coating.

### Limitations

The minimum floor application temperature for RapidShield™ 0007 Clear is -5°C/23°F and 3°C above dew point. Optimum application temperature is 20°C. Maximum relative humidity is 85%.

RapidShield™ 0007 Clear should not be applied to new or wet concrete floors.

**Check For Moisture:** Concrete moisture testing must occur. Calcium chloride testing or in-situ relative humidity testing is strongly recommended. Readings must be below 3 pounds per 1,000 square feet over a 24-hour period on the calcium chloride test, or below 70% relative internal concrete humidity (not to exceed 2.0% Core Moisture (CM)). Test methods can be purchased at [www.astm.org](http://www.astm.org), see ASTM F1869 or F2170, respectively or follow manufacturer's instructions.

**Note:** Although testing is critical, it is not a guarantee against future problems. This is especially true if there is no vapor barrier or the vapor barrier is not functioning properly and/or you suspect you may have concrete contamination from oils, chemical spills or excessive salts.

Please consult your Quaker representative or local CFC (Certified Flooring Contractor) when an application requires high impact and/or aggressive wear resistance.

### General Instructions

The following directions and recommendations are intended to serve as a guide and may require modifications to meet local needs:

**Thinning:** Use as received.

**Mixing:** RapidShield™ 0007 Clear is a 100% solids product and is designed to be used as supplied. The product should be stirred for approximately three minutes using a power mixer prior to use.

**Materials:** RapidShield™ 0007 Clear is primarily designed for coating of concrete floors. Please contact your Quaker representative or local CFC for advice on any other substrates.

**Surface Preparation:** It is essential that the primer/seal coat (RapidShield™ 0007 Clear or RapidShield™ 0008 High Build on which RapidShield™ Colors will be applied) is applied to sound, clean and dry surfaces to ensure maximum adhesion.

RapidShield™ 0007 Clear is designed for use as a thin coat primer/seal coat, typically 4-6 mils. RapidShield™ 0008 High Build is designed for use as a primer/seal coat up to 12 mils. Depending upon the roughness of the concrete substrate the coatings will reflect the surface texture of the substrate. If high spots are not removed prior to application and curing of the primer/sealer coat, the RapidShield™ Colors may "roll off" these peaks and not provide full opacity of the surface being covered. The ideal substrate for application is a flat, lightly textured, clean concrete surface.

The concrete surface should be hard, sound and free from dust and other barrier materials such as paint, wax, grease, oil and similar contaminants prior to mechanical preparation. Surfaces should be mechanically prepared, either by grinding or enclosed dust free shot blasting equipment (or similar) and vacuumed clean prior to applying.



## RapidShield™ 0007 Clear

### General Instructions Continued

Ideally a combination of enclosed blasting and spiral/multi-headed grinding would leave a flat clean surface. Any joints or cracks in the concrete base should be repaired and cleaned prior to application.

**Application:** By roller or squeegee. Use with adequate ventilation. Avoid breathing mist or vapors. Consult Material Safety Data Sheet for handling and safety information.

**Shelf Life:** Shelf life is limited to one year in the original packaging and when stored under conditions described below.

### Curing Instructions

Only UV curing equipment authorized by Quaker Chemical Corporation and verified to be in proper operating condition may be used to cure RapidShield™ Products. Curing instructions and parameters are supplied during the (CFC) Certified Flooring Contractor Training Session. Failure to comply with any of these conditions may impact product performance.

### Storage, Safety & Disposal

Quaker supplies this quality product in pails. Other packaging can be made available by Quaker or by your local CFC upon request.

RapidShield™ 0007 Clear should be stored in dry conditions and protected from direct sunlight. Avoid temperatures below 0°C and above 35°C during storage. For the purposes of shipping, RapidShield™ 0007 Clear is resistant to temperatures down to -40°C.

RapidShield™ 0007 Clear is unlikely to present any significant health or safety hazard when used as recommended by Quaker. Good standards of personal and industrial hygiene are to be maintained by the user (see Material Safety Data Sheet).

In order to protect the environment, the product should be safely disposed by a licensed contractor. The packaging material should be handled by a recognized reconditioning firm.



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