valspar FLOORING

# PR-7
## FLEX PRIME

**Technical Data Sheet**

**DESCRIPTION:**
A two component 100% solids, low modulus, low viscosity epoxy primer. This epoxy primer is specially formulated to form a tough flexible film. This resilient primer has stress relieving and moisture tolerent properties.

**USES:**
PR-7 is designed as a primer for Valspar epoxy and urethane coatings as well as the broadcast and troweled systems.

**ADVANTAGES:**
- 100% Solids
- Low tensile modulus
- Higher tensile elongation
- Excellent penetration and adhesion
- Moisture tolerant

**COVERAGE:**
Approximately 300-400 sq. ft. per mixed gallon at 5 mils.

**PACKAGING:**
PR-7 Flex Prime Resin and Hardener components are available in 3-US gallon kit, 15-US gallon kit, and 165-US gallon kit.

**MIXING RATIOS:**
ALL PROPORTIONS BY VOLUME:

| | |
|---|---|
| PR-7 Flex Prime Resin, Part R | 2 Parts |
| PR-7 Flex Primer Hardener, Part H | 1 Part |

For pigmentation, use one quart of Epoxy Color Additive for 3 mixed gallons. Some “color streaking” may occur after the PR-7 has cured.

**ASSOCIATED PRODUCTS:**
Preparation: PC 40 DYNOMITE
PC 41 SOLV KWIK
PC 42 ACID CONDITIONER

Typical Physical Properties

| | |
|---|---|
| Non-volatile content | 100% |
| Flash Point | >200°F |
| Shelf Life | 18 months (unopened container) |
| Pot Life | Approx. 25 minutes @ 77°F and 50% relative humidity |
| Recoat time | 6-24 hrs. @ 77°F |
| Application method | ¼ inch nap roller or squeegee or trowel |
| Cure time | 6-8 hrs. @ 77°F and 50% relative humidity |
| Mixing method | Low speed with “Jiffy” mixer |
| Thinner | Not recommended |
| Tensile Strength, P.S.I. (ASTM D 638) | 3410 |
| Tensile Modulus, P.S.I. (ASTM D 638) | 150, 480 |
| Tensile Elongation, P.S.I. (ASTM D 638) | 15% to 20% |

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**LIMITATIONS:**
To be used only with the Valspar Flooring Epoxy components. (Consult Valspar Flooring Technical team.)

Technical Data Sheets are updated periodically. To ensure the most current version is being used, visit Technical Resources on *www.valsparflooring.com*.

Proper material application is the responsibility of the user. Site visits by Valspar personnel are for making technical recommendations only and not for supervising or providing quality control.

Do not change the mix ratio of all the components.

Do not add any solvent.

Slab on grade requires vapor/moisture barrier. Substrate must be structurally sound, dry and free of bond inhibiting contaminants.

During installation and initial cure cycle, substrate and air temperature must be minimum 60°F.

Substrate temperature must be at least 5°F above the dew point. (For lower temperatures contact a Valspar representative prior to installation.)

This product is not designed for exterior use, immersion, or any use where moisture can reach the underside of the coating. Do not apply to concrete floors less than 60 days old. Do not apply to floors previously treated with curing and parting compounds or other coatings unless they have been completely removed by chemical or mechanical means. Do not use on vinyl, asphalt, rubber, glazed tile, paving brick, quarry tile, Mexican tile, or similar materials.

Do not apply if the floor or air temperature is below 60°F or over 90°F or if the relative humidity is above 85%. Do not apply over honeycombed or structurally unsound surfaces.

Before applying for protection against specific chemical environments, consult Chemical Resistance Guide or Federal Technical Service.

Sealed surfaces may discolor under tires due to tire plasticizer migration.

If the product is to be applied in or near areas containing foodstuffs, they should be removed before the application and until the coating has fully cured and all vapors have dissipated.

Do not thin this product. Addition of thinners will slow down the cure and reduce the ultimate properties of this product. Critical recoat times will also be affected.

If there is any question as to whether or not the product will adhere to an existing coating, a test patch should be applied and evaluated for compatibility and adhesion.

This product is not intended to be spray applied.

This product has a limited pot life. Product should not be applied by dipping roller into kit container, but by pouring a bead of product in the form of a ribbon on the surface to be coated.

**NOTE: Addition of Epoxy Color Additive to this product may result in color streaking and non-uniform appearance.**

**PRELIMINARY FLOOR INSPECTIONS:**

In general, the area to be surfaced must be clean, sound, dry and above 60°F to assure a successful installation. Concrete must be at least 60 days old.

If there is uncertainty as to whether or not a curing compound or any coating is present on the floor, the following two tests may be performed in order to find out:

1. Pour a cup of water on three or four areas of the floor. If the water puddles out, then there probably is no curing compound or any coating on the floor, and the preparation process may begin. However, it the water beads up like on a waxed car, this may indicate the presence of a curing compound or any coating that must be removed by chemical or mechanical means.
2. Place a drop of PC-42 ACID CONDITIONER on the floor. If the acid bubbles, a curing compound or any coating is not present.

Always be alert to any possible airborne or surface contaminants that may contribute to problems such as fisheyes, crawling, cratering, etc.

The concrete floor should be examined for the presence of moisture. This can be accomplished by the following means:

1. Calcium Chloride Test
2. Delmhorst Moisture Meter
3. Polyethylene Sheet Method

Calcium Chloride Test: This test method works by a change in weight of moisture absorbing anhydrous calcium chloride and indicates the amount of moisture transmitting out of a large concrete surface area. Pounds is the equivalent weight of the water that is emitted from a 1,000 square foot concrete slab surface area in a 24 hour period of time (standard test duration is 60 hours). Concrete must not show moisture content greater than three pounds per 1,000 square feet in 24 hour time frame. Follow instructions as outlined by the supplier of the test kits. Make sure the concrete surface to be tested is completely clean of any residue and any debris. All seals, including curing compounds must be removed prior to performing tests. Sources: Roofing Equipment Inc., Denver, CO 303-371-7667; Sealflex

Industries Inc., Costa Mesa, CA 714-708-0850; Vinyl Plastics Inc., Sheboygan, WI 920-458-4664; and Floor Seal Technology, San Jose, CA 408-436-8181

**SURFACE PREPARATION:**

All oil, grease, wax, laitance, curing compounds, water-soluble concrete hardeners and other surface contaminants must first be removed. PC-43 WASH OFF REMOVER or PC-46 DRY EZE should be used for removal of sealers finishes and paints. Inspect the concrete and remove loose or soft concrete by scarifying, sand blasting or high pressure water blasting.

**STANDARD TESTS:**
**Refer to the standard test methods below for further information.**

| | |
|---|---|
| ASTM D 4258-83 | Standard Practice for Surface Cleaning Concrete for Coating |
| ASTM D 4259-83 | Standard Practice for Abrading Concrete |
| ASTM D 4260-83 | Standard Practice for Acid Etching Concrete |
| ASTM D 4262-83 | Standard Test Method for pH of Chemically Cleaned or Etched Concrete Surfaces |

**CHEMICAL PREPARATION:**
PC-40 DYNOMITE should be used as directed to remove all traces of grease, oil, and dirt followed by a thorough rinsing to remove all cleaning residues. Remove excess water with a good wet vacuum. To remove laitance and to give a slight texture to area to be surfaced, acid-etch using PC-42 ACID CONDITIONER. Using a 1:1 dilution ratio with water, apply evenly as possible to the surface and vigorously scrub into the surface with a stiff bristle brush or automatic scrubber. Thoroughly rinse with copious quantities of water and use wet vacuum to remove any residues. Repeat this process until concrete surface is the texture of medium grit sandpaper.

**MECHANICAL PREPARATION:**
Mechanically abrade the concrete, by grinding, scarification or “shot-blasting” the surface to the texture of medium grade sandpaper. Next, sweep and vacuum any remaining dirt and dust with a wet/dry vacuum. Removing residual dust will help ensure a tenacious bond from the primer.

Whenever “shot-blasting” is utilized, be careful to leave concrete with a uniform texture. Over “blasting” will result in reduced coverage rates of the PR-7 FLEX PRIME and/or subsequent topcoats. It is also possible that the texture of the “shot-blast” pattern may show through the last coat. This is known as “tracking”.

**NOTE:** Although, chemical preparation may be required on some surfaces, mechanical preparation is highly recommended and in most cases more efficient. It is not uncommon that a combination of the two is required.

**MIXING PROCEDURES:**
For pigmentation purpose, add the Epoxy Color Add to the resin blend prior to the hardener addition.

Add PR-7 Flex Prime Hardener, Component H, to the PR-7 Flex Prime Resin, Component R, and mix thoroughly, using a Jiffy mixer blade, for about 2-3 minutes. **DO NOT CREATE AIR BUBBLES**.

**APPLICATION:**
1. Mechanically mix resin and hardener parts separately.
2. Mix one part hardener portion into 2 parts resin portion using a Jiffy mixer.
3. Apply primer by roller, trowel or squeegee at the rate of 300-400 square feet per mixed gallon. Coverage will vary depending on the porosity of the prepared floor.

**POT LIFE:**
The pot life on this product is approximately 25 minutes at 75℉ and 50% R.H. **High temperature and high humidity will accelerate curing and reduce pot life.** Since this is not a solvent based system the pot life is relatively short. Do not mix more material than can be used within this period of time.

**CURE TIMES:**
The floor area should be maintained at a temperature range of 60℉ or less than 90℉ during application and curing. At 75℉, the coated area should be ready for foot traffic within 6-8 hours.

**CLEAN-UP:**
Equipment should be cleaned immediately after use with soap and water or UR-9 MCU THINNER.

**CRITICAL RECOAT TIME:**
It is important to apply subsequent coats of this and other products within 6 to 24 hours (under normal curing conditions). If this coating is allowed to cure longer than the 24 hours before subsequent recoats, screening will be necessary. The floor surface should be screened to the effect that a uniform dullness is achieved. There should be no gloss present on the floor before applying the next coat.

**TROUBLE SHOOTING:**

| PROBLEM OBSERVED | POSSIBLE CAUSES |
|---|---|
| Fisheyes | Oil Contamination; Improper substrate cleaning; Mold Release Agents; Improper Mixing. |
| Peeling From Substrate | Insufficient preparation process; Oil impregnation; Moisture in concrete. |
| Peeling Between Coats | Past critical recoat time; Contamination between coats. |
| Coating Soft, Dulling | Improper mixing; Use of thinner in product; Extreme weather conditions. |
| Slow Cure | Low floor and ambient temperatures; Use of thinner in product; Improper mixing; Product applied too thin. |
| Fast Cure | High floor and ambient temperatures. |
| Bubbling | High temperatures; Working product past pot life; Improper mixing overworked the product. |

**REFER TO MATERIAL SAFETY DATA SHEET FOR FURTHER SAFETY AND HANDLING INFORMATION**.

**See individual labels for more caution statements.**

**KEEP OUT OF THE REACH OF CHILDREN.**

**DISPOSAL:**
Dispose in accordance with federal, state, and local regulations. Use licensed hazardous waste company.

Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned.



TDS-PR7 | Rev 03/15/07 ly