



POR-15® Restoration Products

POR-15 POR-PATCH

General Information

PORPATCH is a thick, pudding-like substance which acts as a total rust inhibitor and is also very effective as a metal filler. PorPatch can be easily brushed, or troweled. It chemically bonds to rusted steel to form a rock-hard, non-porous coating that won't crack, chip, or peel. Because it is actually POR-15 in a thickened state, it works by isolating metal from moisture; without moisture present, steel can't rust. PorPatch is easier and less expensive to apply than epoxies because it doesn't require mixing. Since PorPatch actually bonds chemically to metal, the underlying surface does not have to be sanded before application. As long as loose or flaking rust is removed from the surface, an application of PorPatch will not only cover up the rust and prevent it from spreading, but will strengthen the underlying metal and seal holes by forming its own membranes.

PORPATCH is a highly concentrated version of world famous POR-15 Rust Preventive Paint. Through new blending technology, we have added solids, reduced the solvent carrier, and homogenized the resulting blend into a thick, workable paste which can be troweled from a can or squeezed from a tube. A cured mass of PorPatch is virtually indestructible, yet it will remain flexible and won't crack or chip. Because it's non-porous, PorPatch can totally seal seams like no other product, and like regular POR-15, it can be applied directly to rusted surfaces.

PORPATCH is the ultimate filler. It hardens like steel, but won't chip or crack. It has the consistency of chocolate pudding and can be used to repair concrete and cinderblock. It will fill holes in steel, wood, plastic; it is waterproof and non-porous. As a moisture barrier, PorPatch is unsurpassed, and its bonding characteristics to cured concrete far exceed those of cement and other patching compounds. It will not crack or fracture even when pounded on with the heaviest mallet! PorPatch is also a heavy-duty adhesive and can be used to bond plastic to steel or concrete or wood. Use PorPatch to repair broken, cracked concrete, cement walkways; dock maintenance: make waterproof patches to repair pre-formed concrete where moisture has penetrated through cement patches and caused rusting of rebar and expansion through freezing; waterproof concrete tanks, repair joints where railings have loosened from their concrete base. PorPatch is impervious to all fuels and can be used for exterior repairs to fuel tanks along with standard fuel tank repair. PorPatch dries to the touch in about 4 hours, but full cure may take 96 hours(4 days) or more, depending on the thickness applied.

CHARACTERISTICS

Solids - 78%; Vapor Pressure - 38mm Hg; Boiling Point - NA; Specific Gravity - 1.05; Percent volatile by volume - 22%; Weight per quart - 2.6 lbs; Weight per tube - 4.6oz; Solubility in water - insoluble.

APPLICATION OF POR-15 TO NEW METAL

For proper adhesion to aluminum, galvanized metal, and smooth steel surfaces, prep first with POR-15 METAL-READY Rust Remover/PrePrimer. Keep surface wet for 15 minutes, then rinse off with water and dry thoroughly. This process will leave a zinc phosphate coating on the metal and insure perfect adhesion.

Appearance: Semi-Gloss black finish.

Application: Brush, roller, trowel

Spreadability: Depending on thickness applied

Recommended Temperature Application: 45°F - 95°F.(7-35°C)

Drying Time: Varies according to humidity; average is 5 - 8 hours.

Shelf Life: Unopened can or tube - 2 years or more. Opened can-up to 6 months.

Solubility: **PORPATCH** is readily soluble in esters, ketones, and aromatic solvents.

LABORATORY TEST RESULTS

PORPATCH was tested for 168 hours at 97°F(36°C) in a condensing humidity salt spray (ASTM B117). At the end of the test period, coated steel was free of rust or pitting.

Acid and alkali resistance test performed found panels coated with **POR-PATCH** to be impervious to gasoline, oil, chromic acid, hydrochloric acid, phosphoric acid, sodium hydroxide, caustic soda, 50% sulfuric acid, 50% hydrofluoric acid.

PORPATCH was applied over a rusty substrate as a finish coat (approximately 2-3 mils (50-75um) dry film thickness). The coating showed essentially no undercutting at the scribed area after 2000 hours in a weatherometer*.

A 2 mil (50um) thickness of **PORPATCH** was applied to lightly rusted steel and then exposed for 1000 hours to a salt spray. At the end of the test period, no undercutting was observed at the scribed area.

Recoatibility is excellent. Laboratory tests have shown very good adhesion when applied up to 14 hours after application of the first coat. In an actual field test, a topcoat was applied 2 weeks after the first coat had been applied, and the intercoat adhesion was excellent as determined by a crosshatch tape test.

A metal box used as a filter for raw sewage was coated with **PORPATCH** and placed in service within a few hours after the interior and exterior were coated. No visible rusting occurred at the welded areas after a six month exposure.

A **PORPATCH** coating was subjected to 500°F(260°C) for 10 hours; it remained hard and showed no apparent loss of adhesion.

A panel subjected to elongation was pulled beyond the yield point of the base metal without affecting the **PORPATCH** coating.

*WEATHEROMETER - Dew cycle XWR with corex D filter, cycle is:

1. 30 minutes sun, 135°F (57°C), 30% relative humidity.
2. 30 minutes dark, 75-80°F (23-26°C), 100% relative humidity (achieved with water spray on panel backs).

TYPICAL APPLICATIONS

Use as a primer or finish coat.

Automobiles: fenders, floorboards, bumpers, trunk areas, engine compartments, rockers.

Trucks, trailers, storage tanks, agricultural equipment, snow removal and highway equipment, factory machinery, bridges, boats, all types of marine use.

Outdoor sign supports, fencing, metal roofs, fire escapes.

Use to waterproof insulation or wood. As a filler for metal.

Use as a bonding agent on wood or styrofoam. Prevents rust in refrigeration units where moisture corrodes metal.

ADVANTAGES OF PORPATCH OVER MOST DUAL-COMPONENT COATINGS OR SEALERS

Better chemical resistance, better adhesion to metals, greater ease of application, strengthened by exposure to moisture. Reasonable pot life, non-shattering, great flexibility. No catalyst required for curing.

CONTAINER AVAILABILITY:4oz Tube

Information contained herein is to our knowledge true and accurate, but all recommendations or suggestions are made without guarantee. Since the conditions of its use are beyond our control, RestoMotive Laboratories/POR-15, Inc. disclaims any liability incurred in connection with the use of its products and information contained herein. No person is authorized or empowered to make any statement or recommendation not contained herein, and any such statement or recommendation so made shall not bind the Corporation. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use, and no license implied or in fact is granted herein under the claims of any patents.