



POR 15 EPOXY PUTTY

APPLICATION INFORMATION

PRODUCT DESCRIPTION & ADVANTAGES:

POR 15 HAND WORKABLE PUTTY

Has no equal as a gap filler and construction material, it bonds, seals, fills, anchors, caulks & waterproofs!

- Mixes like clay.....hardens to a rigid solid in one hour!
- Cut what you need—no measuring, no weighing.
- Good “feel”.... Easily mixed....smooth into place with wet fingertips.
- Can be sanded, drilled, machined, sawed and painted.
- Use on metal, wood, brick, stone, concrete, plastic, glass and tile.
- Adheres to damp surfaces....even cures under water!
- Cures chemically, doesn't shrink. Cures 'rock hard'.
- No odour...cleans up with water before hardening.
- Very good insulator
- Useful to 150°C(300°F).
- Widely used to modify racing engines... heads, headers and manifolds.
- Fixes leaky fuel tanks without draining...carry some in your car and truck.
- Stays in place, doesn't slump or sag

INSTRUCTIONS BEFORE USING POR15 PUTTY

A clean, dry surface is a necessary pre-requisite for proper adhesive bonding; and adhesive will either stick to a surface where a bond is desired or to whatever film may be on that surface. Rarely can a structural adhesive penetrate through surface contaminants to provide an optimum bond when the surface is not clean.

Porous materials are simple to bond to, provided they are dry. Surfaces should be sanded until clean and free of dust. Non-porous surfaces such as metal and plastic should be degreased, dried and roughened by sanding, sandblasting, or chemical etching. Etched or sandblasted surfaces should be covered within a few hours of treatment to prevent contamination. Handlers should wear clean cotton gloves to prevent body oils from contaminating the clean surfaces. For best results, follow the preparation procedures over the page, and the application procedures listed below, where practical.

DIRECTIONS FOR USE:

FOR MAXIMUM STRENGTH AND MINIMUM SET-TIME... THE A AND B HALVES MUST BE MIXED THOROUGHLY!

1. Hands should be clean and free from oil. Wash thoroughly with soap and water.
2. Use equal parts of A and B. Lay side by side and make a common cut through both bars.
3. Tear, roll, fold and kneed the halves together vigorously until thoroughly mixed with uniform colour.
4. Mix for at least 2 minutes for a walnut sized piece. Mix for at least 15 minutes for the whole pound. (until it has a smooth colour with no striations.)
5. The warmer the temperature, the faster the POR15 Putty will cure. At 24°C(75°F) the cure time is 60 minutes. Reducing the temperature by 2.5°C(5°F) will double the cure time. Use a hot air gun to shorten the time.
6. Thoroughly clean and roughen surfaces (see reverse side of page).
7. Apply and let cure until hard. Use water on fingertips to smooth & feather putty into shape.
8. Tightly rewrap exposed end with tin foil or plastic wrap. Exposed end may discolour over a period of time, -if it does, remove the discoloured part before reusing.
9. After applying, wash hand thoroughly with soap and water.
10. Avoid prolonged contact with skin. Wash hand before eating or smoking.

POR-15 Epoxy Putty—Can be used on plumbing fixtures, basement walls, swimming pools, steering wheels, plastic parts/knobs, fill rust pits/holes, repair woodwork, doors, hinges, latches, repair tool handles, patch concrete and more!

For best results, follow the preparation procedures listed below and the application info on front page, where practical.

ALUMINIUM AND ALUMINIUM ALLOYS

1. De-grease with trichloroethylene.
2. Dip in the following solution for 10 minutes:
3 parts sodium dichromate
10 parts 96% sulphuric acid
20 parts water
(Be careful to dissolve sodium dichromate in water, then add sulphuric acid slowly)
3. Rinse in ambient water.
4. Rinse in hot 50-60°C (150-170°F) distilled water.

COPPER, BRASS AND OTHER COPPER ALLOYS

1. De-grease with trichloroethylene.
2. Dip in a solution consisting of 6 parts ferric chloride, 30 parts concentrated nitric acid and 200 parts water (dissolve the ferric chloride in the water, add the nitric acid slowly). Or dip in a 25% aqueous solution of ammonium persulphate for 1-2 minutes.
3. Rinse with distilled water and dry.

FERROUS ALLOYS OTHER THAN STAINLESS

1. De-grease with trichloroethylene.
2. Sandblast, sand (100 grit) or etch in 15% aqueous hydrochloric acid (equal parts concentrated muriatic acid and water) for 10 minutes. Etched surface should be rinsed immediately and dried with hot air. Freshly sandblasted or etched steel begins to rust immediately; therefore adhesive should be applied as soon as the surface has been prepared.

NYLON, ABS, POLYCARBONATE, ACRYLATE, EPOXIES, ZINC, LEAD, NICKEL, TIN

1. De-grease with acetone, methy ethyl ketone or trichloroethylene.
2. Mechanically abrade (sandblast, scrape, rub).
3. De-grease.

STAINLESS STEEL, CHROMIUM

De-grease with trichloroethylene. Etch with concentrated hydrochloric or muriatic acid for 15 minutes at room temperature or with a solution consisting of 90 parts water, 96% sulphuric acid, and 0.2 parts Nacconol NR (National Aniline) for 10 minutes at 50°C (150°F) followed by 10 minutes at room temperature in a solution consisting of 90 parts water, 15 parts 70% nitric acid and 2 parts 48% hydrofluoric acid.

STONE, CERAMICS, GLASS

1. De-grease with trichloroethylene.
2. Wire brush (stone), sandblast

| PHYSICAL PROPERTIES | VALUE | TEST METHOD |
|--------------------------------------|--------------------|-------------|
| Tensile strength, psi | 4000 | ERF 6-69 |
| Compressive strength, psi | 12,000 | ERF 6-69 |
| Bond strength, psi | 375 | ASTM D 1002 |
| Co-efficient of expansion in/in°F | 4x10 ⁻⁵ | ERF 11-69 |
| Maximum use temperature °C(°F) | 150(300) | APCO LAB |
| Hardening time, minutes @ 24°C(75°F) | 60 | APCO LAB |
| Colour | Light Grey | |
| Specific Gravity | 1.95 | |
| ELECTRICAL PROPERTIES | | |
| Dielectric Strength, Volts/mil | 300 | ASTM D 149 |

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