



# PSI-591 Primer for Porous Surfaces

## Product description

PSI-591 Primer is a reactive polyurethane which promotes the adhesion of PSI sealants, primarily to porous substrates such as concrete. It reacts with atmospheric moisture to form a hard film with outstanding water resistance and high adhesive strength to many materials.

## Basic uses

PSI-591 Primer should be used when a single-component primer is needed on porous materials such as when firming up friable or sandy concrete, or on brick and stone. It also provides water resistance when PSI sealants are used on non-porous materials such as metals and plastics. Because of the wide variability of substrates, it is recommended that product performance be confirmed by pre-testing primer and sealant on project surfaces prior to use.

## Application limitations

- If sealant cannot be installed within 8 hours, reapply primer
- Do not apply over wet or damp substrates.
- Do not apply primer to backer rod to prevent three-sided adhesion.
- Keep can tightly closed when not in use.
- Flashpoint 50°F (10°C).

## Packaging

Available in quart can filled to 30 fl oz (887 ml).

## How to use

**Surface preparation:** Surfaces to which primer is to be applied must be clean, dry and free of laitance, loose aggregate, mastic compounds, release agents, waterproofing compounds, oil, grease, wax, corrosion, rust and previously applied sealants. Fresh concrete should be thoroughly cured and dry before application of primer. Keep container tightly closed until ready to use.

When resealing surfaces previously sealed with oil base

## Health precautions



### Warning!

Highly flammable liquid and vapor. Harmful if swallowed. Causes serious eye irritation. Causes skin irritation. Suspected of causing cancer.

*Refer to the Safety Data Sheet (SDS) for complete health and safety information.*

or other mastics, remove all traces of old material. If oil has been absorbed by masonry, it may be necessary to sandblast or cut back the joints to expose clean substrate.

**Application:** Apply primer by brush or roller in a thin continuous film. Avoid pools, runs and drips. Primer should always be applied within the joint confines as product on exposed substrate may discolor the surface. Exposed surfaces can be masked prior to application to prevent application to non-joint surfaces. Any primer applied outside of the joint should be removed immediately with mineral spirits.

Allow primer to dry completely before application of sealant. At 70°F (21°C) drying time is approximately 1 hour. PSI-591 Primer is moisture activated. Humidity levels below 50% will require longer drying times. If the primer dries more than 8 hours, reapply a thin coat of primer as described above.

**Cleanup:** Equipment can be immediately cleaned after use with mineral spirits or isopropyl alcohol. When using flammable solvents, consult manufacturer's SDS for safety precautions.

## Application Properties\*

Properties	Results
Consistency	Amber colored liquid
Specific gravity	0.8
Density	8.3 lb/gal (0.99 g/cm <sup>3</sup> )
Dry time from priming to sealant application dependent on ambient temperature and relative humidity	30 minutes to 2 hours
Open time	8 hours
VOC content	6.5 lb/gal (779 g/L)

\* Typical properties are for information only, not for purposes of specification. The data above represents product performance in ideal laboratory conditions. Individual users' experience may vary depending on application conditions.

**Shelf life and storage:** Six months from date of shipment when stored in original, unopened container at temperatures between 40 and 80°F (4 to 27°C).

### Technical services

PSI provides performance data, specification assistance and use evaluations.

**Adhesion testing by PSI:** This program is intended to eliminate potential field application problems by pre-testing the adhesion of PSI's construction sealants on samples of building materials submitted by the customer. The tests will aid in determining the proper surface preparation method, effective solvents for cleaning and whether priming is necessary to achieve optimum adhesion. Following this procedure will remove many of the variables that affect field success.

Test samples should be identified as to manufacturer, origin, designed use, building project, person and firm originating the request. Appropriate sketches or drawings showing the intended use can be helpful. Contact your PSI sales representative for more information.

**Jobsite testing of substrates:** A field test can be performed by applying several feet of the sealant to a representative joint and letting it reach full cure. Make a cut in the cured sealant across the joint the entire depth of the sealant. Make two vertical cuts several inches long, paralleling the sides of the joint as closely as possible and extending down from the cross cut.

Grasp the free length of sealant and pull at a 90° angle to determine if a good bond has developed. With good adhesion, the sealant will usually tear cohesively or be difficult to remove from the surface.

### Contact Details

Polymeric Systems, Inc., is a part of Whitford Worldwide.

For more information, please contact Polymeric Systems or Whitford Ltd. at:

Polymeric Systems, Inc.  
47 Park Avenue

Elverson, PA, USA 19520

Tel: [1] (610) 286-2500

Email: [sales@polymericsystems.com](mailto:sales@polymericsystems.com)

Website: [polymericsystems.com](http://polymericsystems.com)



Whitford Ltd.

11 Stuart Road, Manor Park  
Runcorn, Cheshire, UK WA7 1TH

Tel: [44] (0) 1928 571000

Email: [salesuk@whitfordww.com](mailto:salesuk@whitfordww.com)

Website: [whitfordww.com](http://whitfordww.com)

Toll Free: 800-CAULK IT (800-228-5548)

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