



Protective & Marine Coatings

STEEL SPEC® 4013 UNIVERSAL PRIMER/FINISH (FORMERLY STEEL SPEC FHP UNIVERSAL PRIMER/FINISH)

B50WV8000
B50AV8002

WHITE
GRAY

Revised: May 9, 2022

PRODUCT INFORMATION

2.52

PRODUCT DESCRIPTION

STEEL SPEC 4013 Universal Primer/Finish is a heavy-duty, weldable, fast-drying, rust inhibitive alkyd primer/finish. This durable primer is formulated to provide the highest degree of corrosion protection where construction schedules are longer and extended environmental exposure is expected.

Steel Spec 4013 Universal Primer/Finish is less than 340 g/L VOC. In addition to alkyds and acrylic latex coatings, this primer can accept a wide range of topcoats containing strong solvents, such as epoxies and urethanes. This product can also be used as a standalone finish coat for Architecturally Exposed Structural Steel (AESS).

PRODUCT CHARACTERISTICS

| | |
|----------------|-----------------------------|
| Finish: | Flat |
| Color: | White and Gray |
| Volume Solids: | 63% ± 2%, may vary by color |
| Weight Solids: | 81% ± 2%, may vary by color |
| VOC: | <340 g/L; 2.8 lb/gal |

Recommended Spreading Rate per coat:

| | Minimum | Maximum |
|--|---------|---------|
| Wet mils: | 3.0 | 6.5 |
| Dry mils: | 2.0 | 4.0 |
| Theoretical coverage sq ft/gal @ 1 mil dft | 1010 | |

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 4.0 mils wet @ 50% RH:

| | @ 40°F | @ 77°F | @ 120°F |
|------------|------------|----------------|------------|
| To touch: | 25 minutes | 15 minutes | 5 minutes |
| To handle: | 90 minutes | 45 minutes | 30 minutes |
| To recoat: | | | |
| itself: | 7 hours | 1 hour | 1 hour |
| epoxy: | | 3 hours @ 77°F | |
| urethane: | | 3 hours @ 77°F | |

Drying time is temperature, humidity, and film thickness dependent.

| | |
|---------------------|--|
| Shelf Life: | 36 months, unopened Store indoors at 40°F to 100°F. |
| Flash Point: | 90°F, PMCC |
| Reducer / Clean Up: | Xylene* |

*other reducers may be appropriate depending on environmental conditions and/or local restrictions

RECOMMENDED USES

For use in light commercial and/or architectural construction *materials* where steel will be exposed to an environment of C2 or less (per ISO 12944). Appropriately topcoated, Steel Spec 4013 Universal Primer/Finish may be exposed to a more aggressive exposure of C3 (Moderate Industrial).

This product is solely for use in a controlled shop environment to surfaces such as those listed below. It is not to be field applied in residential or commercial structures.

- Structural steel
- Storage tanks (above ground)
- Machinery and equipment
- Piping & pipe racks
- Ornamental iron
- Architecturally Exposed Structural Steel (AESS)

PERFORMANCE CHARACTERISTICS

- Weld Test: Passed AWS D1.1
- Meets or exceeds performance requirements of SSPC Paint 15
- Meets or exceeds performance requirements of products formulated to SSPC Paint 25
- Meets or exceeds performance requirements of CISC/CPMA Standard 1-73a
- Meets or exceeds performance requirements of CISC/CPMA Standard 2-75
- MPI 79 Listed

Steel Spec 4013 has been tested with numerous cementitious/intumescent fireproofing materials with satisfactory adhesion and compatibility results. When using Steel Spec 4013 under fireproofing products, defer to the primer surface preparation requirements in the product data sheet of the fireproofing product and not necessarily the primer requirements. Contact your Sherwin Williams representative for specific information and product recommendations.

SURFACE PREPARATION

Surface should be free of dirt, oil, grease, moisture and other contaminants. All loose rust, loose mill scale and loose paint must be removed by hand or power tool cleaning in accordance with SSPC-SP2 or SSPC-SP3.

APPLICATION CONDITIONS

| | |
|--------------------|---|
| Temperature: | 40°F minimum, 120°F maximum (air, surface, and material) At least 5°F above dew point |
| Relative humidity: | 85% maximum |



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RECOMMENDED SYSTEMS

| | Dry Film Thickness / ct. Mils |
|---|----------------------------------|
| Steel, Alkyd Topcoat: | |
| 1 ct. Steel Spec 4013 | 2.0-4.0 |
| 1-2 cts. Industrial Enamel HS | 2.0-4.0 |
| Steel, Acrylic Topcoat: | |
| Topcoat only after 16 hours minimum dry @ 77°F & 50% RH | |
| 1 ct. Steel Spec 4013 | 2.0-4.0 |
| 1-2 cts. Sher-Cryl 1300 | 4.0-7.0 |
| Steel, Epoxy Topcoat: | |
| 1 ct. Steel Spec 4013 | 2.0-4.0 |
| 1-2 cts. Macropoxy 646 | 5.0-10.0 |
| Steel, Polyurethane Topcoat: | |
| 1 ct. Steel Spec 4013 | 2.0-4.0 |
| 1-2 cts. Hi-Solids Polyurethane | 3.0-4.0 |
| or | |
| 1-2 cts. Acrolon 218 HS | 3.0-6.0 |
| Steel, Finish Coat: | |
| 1 ct. Steel Spec 4013 | 2.0-4.0 |
| or | |
| 2 cts. Steel Spec 4013 | 2.0-4.0 |

The systems listed above are representative of the product's use, other systems may be appropriate.

TINTING

Do not tint with more than 1 oz. Maxitoner colorant.
Color: White

ORDERING INFORMATION

| | |
|--------------------|------------------------------------|
| Packaging: | 5 gallon pails and 53 gallon drums |
| Weight per gallon: | 14.2 ± 0.2 lb, may vary by color |

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Xylene. Clean tools immediately after use with Xylene. Follow manufacturer's safety recommendations when using any solvent.

SAFETY PRECAUTIONS

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean UpXylene

Airless Spray

| | |
|-----------------|------------------------------|
| Pressure..... | 1800 psi minimum |
| Hose..... | 1/4 - 3/8" ID |
| Tip | .017" - .019" |
| Filter..... | 60 mesh |
| Reductions..... | as needed up to 5% by volume |

Conventional SprayNot recommended

Brush

| | |
|----------------|------------------------------------|
| Brush..... | Natural Bristle or Nylon Polyester |
| Reduction..... | Not recommended |

Roller

| | |
|----------------|-------------------------------------|
| Cover | 1/4 - 3/8" woven with phenolic core |
| Reduction..... | Not recommended |

When temperatures are above 95°F it may be necessary to thin the product with a blend of R2K7 and R2K4.

If specific application equipment is not listed above, equivalent equipment may be substituted.

PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Xylene, R2K4.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.