

## Selection & Specification Data

|  |   |
|--|---|
| <b>Generic Type</b>                      | Multi corrosion inhibitor pigmented, modified alkyd primer  |
| <b>Description</b>                       | An economical primer for protection of steel surface. Applied by conventional spray or brush at a thickness of 1~1.5 mils (38µm). Fast drying with good wetting properties. Good resistance to atmospheric weathering. Most alkyd topcoats can be applied over Starox 2101 (P).       |
| <b>Recommended uses</b>                  | As a primer coat on steel structures, water tank exteriors, petroleum tank exteriors, crew boat exteriors and interiors, barge exteriors and interior void space, machinery, equipment, pipe exteriors, pipe racks, and other ferrous surfaces not exposed to severe chemical attack. |
| <b>Limitations</b>                       | Not for immersion applications or splash and spillage of acids, alkalies or solvents.   |
| <b>Color</b>                             | Red (0500), Gray(0700)  |
| <b>Finish</b>                            | Flat  |
| <b>Dry Film Thickness</b>                | 1.5 mils (38 microns) per coat  |
| <b>Solids Content</b>                    | By Volume: 45% ± 2%   |
| <b>Theoretical Coverage Rate</b>         | 722 ft <sup>2</sup> /gal at 1 mils (18 m <sup>2</sup> /l at 25 microns)<br>361 ft <sup>2</sup> /gal at 2 mils (9.0 m <sup>2</sup> /l at 50 microns)<br><br>Allow for loss in mixing and application.  |
| <b>Dry Temp. Resistance</b>              | Continuous: 200 °F (93 °C)<br>Non-Continuous: 250 °F (121 °C)   |
| <b>Topcoat Required</b>                  | May be topcoated with Carboline alkyds, silicone-alkyds or others as recommended. Do not topcoat with coatings containing strong solvents, such as epoxies or vinyls.   |
| <b>Compatibility with other Coatings</b> | Apply directly to substrate.  |

## Substrates & Surface Preparation

|                |   |
|----------------|---|
| <b>Generic</b> | Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.   |
| <b>Steel</b>   | Minimum SSPC-SP3. If abrasive blasted, profile should not exceed 1.5 mils (38 microns). Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating. |

## Mixing & Thinning

|                 |  |
|-----------------|--|
| <b>Mixing</b>   | Power mix until uniform in consistency   |
| <b>Thinning</b> | Up to 10% with Thinner #45.<br>Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied. |

## Application Equipment

Listed below are general equipment guidelines for the application of this product.

Job site conditions may require modification to these guidelines to achieve the desired results.

|                                    |  |
|------------------------------------|--|
| <b>Spray Application (General)</b> | The following spray equipment has been found suitable and is available from equipment manufacturers.   |
| <b>Conventional Spray</b>          | Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .052" I.D. fluid tip and appropriate air cap.   |
| <b>Airless Spray</b>               | Pump Ratio: 30:1 (min.)*<br>GPM Output: 3.0 (min.)<br>Material Hose: 3/8" I.D. (min.)<br>Tip Size: .015-.019"<br>Output PSI: 1800-2700<br>Filter Size: 60 mesh<br>*Teflon packings are recommended and available from the pump manufacturer. |
| <b>Brush &amp; Roller</b>          | Spray application is recommended. However, application by brush or roller is acceptable. Caution should be taken to apply a uniform coat. Avoid excessive re-brushing or re-rolling.   |

March 2017 replaces May 2014

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# Starox<sup>®</sup> 2101 (P)

## Application Conditions

| Condition | Material             | Surfaces             | Ambient               | Humidity |
|-----------|----------------------|----------------------|-----------------------|----------|
| Normal    | 50-90°F<br>(10-32°C) | 50-90°F<br>(10-32°C) | 50-100°F<br>(10-38°C) | 30~80%   |
| Minimum   | 35°F<br>(2°C)        | 35°F<br>(2°C)        | 35°F<br>(2°C)         | 0%       |
| Maximum   | 120°F<br>(49°C)      | 120°F<br>(49°C)      | 120°F<br>(49°C)       | 90%      |

Do not apply when the substrate temperature is less than 5°F (3°C) above the dew point.

Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

## Curing Schedule

| Surface Temp. & 50% Relative Humidity | Dry to Recoat or Dry to Handle |
|---------------------------------------|--------------------------------|
| 50°F (10°C)                           | 8 Hours                        |
| 60°F (16°C)                           | 6 Hours                        |
| 75°F (24°C)                           | 3.5 Hours                      |
| 90°F (32°C)                           | 3 Hours                        |

These times are based on a 1.5 mil (38 micron) dry film thickness. Higher film thickness, insufficient ventilation, high humidity or cooler temperatures will require longer cure times and could result in solvent entrapment or premature failure.

## Cleanup & Safety

### Cleanup

Use Thinner #45 or #2. In case of spillage, absorb and dispose of in accordance with local applicable regulations.

### Safety

Read and follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions. Use adequate ventilation and wear gloves or use protective cream on face and hands if hypersensitive. Keep container closed when not in use.

### Ventilation

When used in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor levels, use MSHA/NIOSH approved respirator.

### Caution

This product contains flammable solvents. Keep away from sparks and open flames. In confined areas workers must wear fresh airline respirators. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

## Packaging, Handling & Storage

### Shelf Life

Min. 12 months at 75°F (24°C)

\*Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.

### Shipping Weight (Approximate)

1 Gallon - 13 lbs. (5.9 kg)  
5 Gallons - 62 lbs. (28.1 kg)

### Storage Temperature & Humidity

35 -110°F (2-43°C)  
0-100% Relative Humidity

### Flash Point : (Pensky-Martens Closed Cup)

77°F (25°C)

### Storage

Store indoors.

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