Compliant Wet-on-Wet Sealer

NCS1990 Compliant Wet-on-Wet Sealer has been specifically developed as a premium quality, 3,5 VOC sealer. This two-component sealer is isocyanate-free and can be used over a variety of substrates and PPG primers. NCS1990 is intended to be the final step before application of the PPG topcoat. This sealer may be tinted with DMC or DMD (non-basecoat) bases.

<table>
<thead>
<tr>
<th>Features</th>
<th>Advantages</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Tintable</td>
<td>• Choice of colors</td>
<td>• Better hiding of topcoat color</td>
</tr>
<tr>
<td>• Compatible with a wide variety of PPG topcoats</td>
<td>• Versatile</td>
<td>• Fewer products required</td>
</tr>
<tr>
<td>• Low VOC</td>
<td>• Compliant with current VOC regulations</td>
<td></td>
</tr>
</tbody>
</table>

Compatible Surfaces:

NCS1990 may be applied over:

- Properly cleaned and sanded steel and galvanized steel
- Properly cleaned and sanded aluminum and fiberglass
- Electrodeposition (E-Coat) Primer
- DF Body Filler
- DPHS52 Low VOC Primer
- DPX170 Wash Primer
- DPX171 Non-Chrome Self Etching Primer
- DPX801 Universal Plastics Primer
- DX1791 Self Etching Wash Primer
- NCP Corrosion Resistant Primer
- NCP250 NCT Primer Surfacer
- NCP280 2.1 VOC Primer Surfacer
- K200 Acrylic Primer Surfacer
- K36 PRIMA Acrylic Primer Surfacer
- K38 High Build Primer Surfacer
- K93 Tintable Primer Surfacer
- OEM Basecoat/Clearcoat and OEM Enamels

★Bare metal substrates must be thoroughly cleaned and sanded and either treated with the appropriate two step metal treatments or primed with DX1791, DPX170 or DPX171 before NCS1990 sealer application.
+ Must Be Cured and Sanded

Catalyst

Compliant Sealer Catalyst
NCX1995

PPG Industries, 19699 Progress Dr., Strongsville, OH 44149 © 2004 PPG Industries 11/04
Preparation

- Wash the area to be painted with soap and water, then clean with DX330 ACRYLI-CLEAN® Wax and Grease Remover, DX393 0.6 VOC cleaner or DX394 1.4 VOC cleaner.
- Sand old finishes with 320-400 grit dry by hand or machine, or 600 grit wet. Sand bare metal areas completely with 180-240 grit (machine).
- Re-clean with DX320 Fast Evaporating Cleaner, DX330, DX393 or DX394. Final wipe with a clean damp cloth to remove any DX393 or DX394 residue.
- Steel and aluminum substrate must have a two step metal treatment or wash primer coating before applying NCS1990.
- Prime aluminum within 8 hours. Prime carbon steel immediately after cleaning.

Mixing Ratios

<table>
<thead>
<tr>
<th>Standard Mix</th>
<th>NCS1990 : NCX1995</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 : 1</td>
</tr>
</tbody>
</table>

**Tinted Mix**

Pre-mix the NCS1990 and NCX1995 for 30 sec. then add reducer and tint and mix until uniform. DO NOT use Basecoat only bases. The chosen tint should have a 4.6 lbs./gal. or less VOC to reach RTS VOC value listed in the Technical Data section.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4 : 2 : 1 : 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pot life for both tinted and un-tinted systems is 1 hour at 70°F (21°C). Pot life is shortened as temperatures increase.

Application and Dry Times

Apply: 1-2 wet coats

Fluid Tip: 1.4 - 1.6 mm or equivalent

Air Pressure: 5-10 PSI at the air cap for HVLP guns
40-50 PSI at the gun for conventional guns

Between Coats: 5-10 minutes

Dry to Topcoat: 20 minutes at 70°F (21°C) or 10 minutes at 90°F (32°C) for 1 coat. (Minimum times may be lower at higher temperatures, minimum film builds or with higher air flow booths)

Dry to Scuff: 75 minutes at 70°F (21°C) or 60 minutes at 90°F (32°C) for 1 coat. (NCS1990 must be scuffed after the listed times)

Force Dry (for repairs): 30 minutes at 140°F (60°C)

IR Medium Wave: 20 minutes

IR Short Wave: 10 minutes
Compatible Topcoats

NCS1990 may be topcoated with:

CONCEPT® (DCC) Acrylic Urethane
CONCEPT® LV (CLV) Acrylic Urethane
DELSTAR®/ DELTHANE® (DAR/DXR 80) Acrylic Polyurethane Enamel
DELTRON® (DBU) Universal Basecoat
  - must be applied wet-on-wet or scuff the NCS1990 before DBU application if dry to scuff times listed in the Application and Dry Time section are reached.
DELTRON® 2000 (DBC/DX57)) Basecoat/Activator
  - DX57 Activator must be used in DBC color over NCS1990.

Technical Data

<table>
<thead>
<tr>
<th>Properties</th>
<th>Standard Mix (a)</th>
<th>Tinted Mix (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC (Package) Ib./US Gal.</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>VOC (RTS) Ib./US Gal.</td>
<td>3.5</td>
<td>4.1 max.</td>
</tr>
<tr>
<td>Total Solids by Volume</td>
<td>53.5%</td>
<td>45.0%</td>
</tr>
<tr>
<td>Sq Ft Coverage/US Gal. (1 mil at 100% Transfer Efficiency)</td>
<td>859</td>
<td>723</td>
</tr>
<tr>
<td>Film build per coat</td>
<td>1.0-1.4 mils</td>
<td>1.0-1.4 mils</td>
</tr>
<tr>
<td>Recommended wet film per coat</td>
<td>2.0 mils</td>
<td>2.0 mils</td>
</tr>
<tr>
<td>Recommended dry film</td>
<td>1.2-2.0 mils</td>
<td>1.2-2.0 mils</td>
</tr>
</tbody>
</table>

(a) Ready-to-Spray (2 : 1, NCS1990 : NCX1995)
IMPORTANT: The contents of this package must be blended with other components before the product can be used. Before opening the packages, be sure you understand the warning messages on the labels of all components, since the mixture will have the hazards of all its parts. Improper spray technique may result in a hazardous condition. Follow spray equipment manufacturer’s instructions to prevent personal injury or fire. Follow directions for respirator use. Wear eye and skin protection. Observe all applicable precautions.

See Material Safety Data Sheet and Labels for additional safety information and handling instructions.

EMERGENCY MEDICAL OR SPILL CONTROL INFORMATION (412) 434-4515; IN CANADA (514) 645-1320

PPG INDUSTRIES, 19699 PROGRESS DRIVE, STRONGSVILLE, OHIO 44149

PPG CANADA, INC. 2301 ROYAL WINDSOR DRIVE, MISSISSAUG, ONATRIO L5J 1K5

Materials described are designed for application by professional, trained personnel using proper equipment and are not intended for sale to the general public. Products mentioned may be hazardous and should only be used according to directions, while observing precautions and warning statements listed on label. Statements and methods described are based upon the best information and practices known to PPG Industries. Procedures for applications mentioned are suggestions only and are not to be construed as representations or warranties as to performance, results, or fitness for any intended use, nor does PPG Industries warrant freedom from patent infringement in the use of any formula or process set forth herein.