Technical Data Sheet

Aerospace Coatings



PR205 HS Epoxy Primer

Product Description

PR205 is a two pack strontium chromate pigmented epoxy primer, designed for the internal and external protection of aircraft.

- Long term corrosion inhibition
- · High solids, low VOC
- Inhibits microbial growth in aircraft fuel tanks
- Available in military grade (Separate TDS available which may be subject to export control restrictions. Please contact your PPG representative to request a copy)

Components



Mix Ratio (by volume)

PR205 (Base) 3 partACT205 (Activator) 1 part

Specifications



PR205 is qualified to:

- 741.140/21-00-00-0018-0T04
- AVN 7-003
- BS2X33B: 1998 + A1: 2005
- MEP 10.059
- MSRR 9064
- SP-J-513-A-0016 Type II Class A

PR205 meets the performance requirements of:

FS 8010-0207 Type II

Product Compatibility

PR205 is compatible with the following topcoat specifications:

- BS2X34A+B
- Def Stan 80-161
- Def Stan 80-225
- SP-J-513-C-0083

Note: PPG Aerospace recommends you check the most recent specification QPLs for updated information.

PR205 Page 1

Surface Preparation and Pretreatment



Ensure that the correct surface pre-treatment has been carried out. Ensure the surface is clean, dry and intact - Desoto[®] CN20 or Desoclean[™] 45 solvent cleaner are recommended.

Instructions for Use



Hand stir or mechanically shake base material until all components are uniformly dispersed. Add activator to base material and mix thoroughly. **Do not add any solvent**. The mixed material is now ready for use.

Note: All products and components should be placed in ambient conditions of 15-30°C (59-86°F) for at least 24 hours prior to mixing and application.



Induction Time:

Not required



Viscosity: (23°C/73°F)

•	AFNOR4	20 - 26 seconds
•	BSB3	40 - 48 seconds
•	BSB4	23 - 26 seconds
•	FORD4	19 - 23 seconds
•	ISO4	38 - 46 seconds
•	ZAHN2	25 - 30 seconds

Note: Viscosities quoted are typical ranges obtained when using specified mix ratio.



Pot Life: @ 21-25°C (70-77°F) Spray Application: 2 Hours

Brush Application: 4 Hours maximum

Application Guidelines

Recommended Application Conditions:

Temperature 15-35°C (59-95°F) Relative Humidity 30-85%

Application:

Ensure equipment is set up correctly to achieve the recommended flow rate and apply a single wet closed coat to achieve 15-25 µm dry film thickness.

PR205



Theoretical Coverage: (ready for use)

30 m²/Lt @ 20 µm dry film thickness 1200 ft/US gal @ 0.8 mil dry film thickness

Recommended Dry Film Thickness:

15-25 µm 0.6-1 mil



Dry Film Density:

1.71 g/cm³ 14.30 lbs./US gal

Dry Film Weight:

34 g/m² @ 20 µm dry film thickness 0.007 lbs/ft² @ 0.8 mil dry film thickness

Note: These application guidelines represent PPG's best advice for usage in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.

Equipment:

PR205 is compatible with most types of current spray equipment, though atomization and low film wetting is difficult to achieve with airless spray and it is not recommended for use.



Equipment Type	Tip Size	Pressure
Airmix	609 to 611	29 to 43 psi (2 to 3 bar)
HVLP Air Spray	1.0 to 1.2 mm	29 to 43 psi (2 to 3 bar)
Pressure Pot	0.85 to 1 mm	29 to 43 psi (2 to 3 bar)
Airless	Not Recommended	
Air-assisted Electrostatic	609 to 611	43 to 72 psi (3 to 5 bar)
Low Pressure Electrostatic	1.0 to 1.2 mm	43 to 72 psi (3 to 5 bar)

Equipment Cleaning:

Clean spray equipment before use and as soon as possible after use, DeSoto[®] CN20 or Desoclean[™] 45 solvent cleaners are recommended.

PR205

Physical Properties



Colour:

Yellow (PR205) Green (PR205/C5145)



Gloss:

< 20 gloss units using a 60 gloss meter



DRYING TIMES	23°C(73°F)	40°C(104°F)	70°C(158°F)
Surface Dry	4 hours	1 hour	30 minutes
Dry to Tape	6 hours	1.5 hours	45 minutes
Dry to Overcoat	4 hours (min.) 48 hours (max.)	1 hour	30 minutes
Full Cure	7 days	24 hours	3 hours

Note: Drying times listed above are dependent upon film thickness applied, air flow conditions and application technique.



Flash Off Time:

15 minutes before force dry



VOC: (ASTM)

Mixed ready for use <350 g/Lt PR205 Base Component 345 g/Lt ACT205 Activator 355 g/Lt



Flash Point:

PR205 Base Component -17°C (1.4°F) ACT205 Activator 23°C (73°F)

Shelf Life:

PR205 Base Component
ACT205 Activator
PR205 Kits
ACT205 Sempens

12 months in original unopened container
24 months in original unopened container
12 months in original unopened container
06 months in original unopened container

Note: Shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.

PR205

<u>Note:</u> The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

Storage Recommendations



Inspect the condition of the container to ensure compliance. The material should be stored at temperatures between 5°C to 35°C (41°F to 95°F) to ensure shelf life.

Note: When procuring to a qualified material specification, follow those storage instructions.

PR205 Page 5

Health Precautions

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Safety Data Sheet (SDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An SDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

For industrial use only. Keep away from children.

Additional information can be found at: www.ppgaerospace.com For sales and ordering information call the local PPG office at the numbers listed below:

Asia Pacific

ASC – Australia Tel 61 (3) 9335 1557 Fax 61 (3) 9335 3490

ASC – Japan Tel 81 561 35 5200 Fax 81 561 35 5201

ASC – South East Asia Tel 65 6861 1119 Fax 65 6861 6162

ASC – Suzhou Tel (86-512) 6661 5858 Fax (86-512) 6661 6868

ASC - Tianjin Tel (86-022) 2482 8625 Fax (86-022) 2482 8600

Americas

1 (818) 362-6711 or 1-800-AEROMIX

Europe and Middle East

ASC – Central Europe Tel 49 (40) 742 193 10 Fax 49 (40) 742 139 69

ASC - Middle East & India Tel (971) 4 883 9666 Fax (971) 4 883 9665

ASC – North Europe Tel 44 (0) 1388 770222 Fax 44 (0) 1388 770288

ASC - South Europe Tel 33 (0) 235 53 43 71 Fax 33 (0) 235 53 54 44

Desoclean and DeSoto are trademarks of PRC-DeSoto International, Inc.

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for the intended use and assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.

This document has been reviewed by the PPG Aerospace Export Control Department and has been determined to contain only EAR99 controlled data

PPG Aerospace Sealants and Coatings Darlington Road Shildon, Co Durham UK DL4 2QP

www.ppgaerospace.com

Issue Date: 05/22 Lit: 4247

PR205 Page 6