

## PR143 (ACT 149) Epoxy Primer

### Product Description

PR143 (ACT149) is a two-pack, ambient curing, chromated epoxy primer developed for the internal and external protection of aircraft.

- Ambient curing
- Excellent resistance to phosphate ester hydraulic oils
- Superior water resistance & adhesion properties
- Excellent corrosion resistance

### Components



#### Mix Ratio (by volume)

- PR143 (Base) 1 part
- ACT149 (Activator) 1 part

### Specifications



PR143 (ACT149) is qualified to:

- BS2X33B
- MSRR 1006
- MSRR 9064

PR143 (ACT149) meets the performance requirements of:

- MIL-P-23377 Type I
- AIMS 04-04-001
- AIMS 04-04-004

#### Product Compatibility

PR143 (ACT149) is compatible with the following primer / topcoat specifications:

- BS2X32
- BS2X34 A+B

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

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## Surface Preparation and Pretreatment



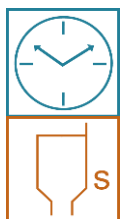
Ensure correct surface pre-treatment has been carried out and that drying and overcoat times within the process are adhered to. Ensure the surface is clean, dry, and intact using a high performance solvent cleaner - DeSoto® CN20 or Desoclean™ 45 solvent cleaners are recommended

## Instructions for Use



Hand stir or mechanically shake the base material until all the components are uniformly dispersed. Add activator to base material and mix thoroughly.

*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.*



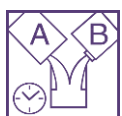
### **Induction Time:**

Not required

### **Viscosity:** ( 23°C/73°F)

- |            |                 |
|------------|-----------------|
| • AFNOR2.5 | 45 - 56 seconds |
| • AFNOR4   | 15 - 16 seconds |
| • BSB3     | 26 - 30 seconds |
| • DIN4     | 13 - 14 seconds |
| • FORD4    | 12 - 15 seconds |
| • ISO3     | 37 - 50 seconds |
| • ISO4     | 18 - 22 seconds |
| • ZAHN2    | 16 - 20 seconds |

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



### **Pot Life:**

8 hours @ 21 - 25°C (70 - 77°F)

## Application Guidelines

### **Recommended Application Conditions:**

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

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## Application:

Apply one wet even cross-coat to achieve a dry film thickness of 15 - 25  $\mu\text{m}$  (0.6-1 mil)

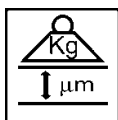


## Theoretical Coverage: (ready for use)

11 m<sup>2</sup> Lt @ 20  $\mu\text{m}$  dry film thickness  
440 ft<sup>2</sup> US gal @ 0.8 mil dry film thickness

## Recommended Dry Film Thickness:

15 - 25  $\mu\text{m}$   
0.6 - 1 mil



## Dry Film Density:

2.2 g/cm<sup>3</sup>  
18.8 lbs/US gal

## Dry Film Weight:

45 g/m<sup>2</sup> @ 20  $\mu\text{m}$  dry film thickness  
0.009 lbs/ft<sup>2</sup> @ 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:

PR143 (ACT149) is compatible with most forms of current spray equipment.



Equipment Type	Tip Size	Pressure
Airmix	9 to 11 thou	725 to 870 psi (50 to 60 bar)
HVLP Air Spray	1.2 mm	22 to 29 psi (1.5 to 2 bar)
Conventional	1.5 mm	43 to 58 psi (3 to 4 bar)
Airless	9 to 11 thou	58 to 87 psi (4 to 6 bar)
Air-assisted Airless	609 to 611	58 to 73 psi (4 to 5 bar)
Low Pressure Electrostatic	1.2 to 1.5 mm	72 to 87 psi (5 to 6 bar)

## Equipment Cleaning:

Clean spray equipment before use and as soon as possible after use, DeSoto<sup>®</sup> CN20 or Desoclean<sup>™</sup> 45 solvent cleaners are recommended.

## Physical Properties

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**Colour:**

Yellow



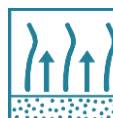
**Gloss:**

<20 units with a 60° gloss meter



DRYING TIMES	23°C (73°F)	70°C(158°F)	125°C (257°F)
Dry to Handle	40 minutes		
Dry to Tape	4 hours		
Dry to Mask	4 hours		
Hard Dry	6 hours	30 minutes	
Re-coat with Self	30 minutes		
Dry to Overcoat	4 to 48 hours		
Full Cure	7 days	3 hours	1 hour

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



**Flash Off Time:**

15 minutes @ 20 - 25°C (68 - 77°F) before force dry.



**VOC: (ASTM) (1:1 mix)**

Mixed ready for use	670 g/Lt
PR143 Base Component	550 g/Lt
ACT149 Activator	785 g/Lt



**Flash Point:**

PR143 Base Component	20°C (68°F)
ACT149 Activator	20°C (68°F)

**Shelf Life:**

PR143 Base Component	24 months in original unopened container
ACT149 Activator	24 months in original unopened container

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

*Note: 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.*

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## 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](http://www.ppgaerospace.com)**

**For sales and ordering information call the local PPG office at the numbers listed below:**

### **Asia Pacific**

#### **ASC – Australia**

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