

ARC2 Polyurethane Topcoat

TECHNICAL DATA SHEET

Product Description

ARC2 is a two pack, abrasion resistant polyurethane topcoat with a slightly textured appearance. ARC2 is designed for use on surfaces where there is a high risk of abrasion due to contact with moving parts.

- Easy to clean finish
- Excellent abrasion resistance
- Excellent durability
- High resistance to aircraft fluids (i.e. de-icing fluids, phosphate ester hydraulic oils)

Components



Mix Ratio (by volume)

- | | |
|---------------------|--------------|
| • ARC2 (Base) | 2 parts |
| • ACT34 (Activator) | 1 part |
| • T74 (Thinner) | to viscosity |

Specifications



ARC2 is referenced on:

- ABP 4-2124
- ABP M9001
- AFS 1296C
- BAEP 3536

Product Compatibility

ARC2 is compatible with the following primer specifications:

- BS2X33A+B

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

Surface Preparation and Pretreatment



Ensure surface is clean, dry and intact, using a high performance cleaner, DeSoto[®] CN20 or Desoclean[™] 45 solvent cleaners are recommended. If necessary abrade with P240-P320 (using a DA sander) P400 by hand de-grease with suitable solvent after sufficient drying time of the previous coats (DeSoto[®] CN20, CN44 or CN13) followed by tack wiping.

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Instructions for Use



Base component may require mechanical agitation. Ensure all components are adequately dispersed. Before adding the activator to the base, thoroughly stir or shake the base component until a smooth uniform mix is obtained. Immediately after adding the activator to the base, stir thoroughly until uniform. Finally add thinner and stir well to ensure uniform mix.

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:

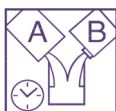
Not required



Viscosity: (23°C/73°F)

• AFNOR2.5	45 - 56 seconds
• AFNOR4	15 - 16 seconds
• BSB3	26 - 30 seconds
• BSB4	15 - 17 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	20 - 35 °C (68 - 95 °F)
Relative Humidity	30 - 85%

Application:

Apply one full wet coat, flash off for 15 minutes and then apply a double track coat to achieve the recommended dry film thickness of 50 - 75 µm. Flash off for a further 30 minutes. Repeat this process to achieve a dry film thickness of 150 µm. It is recommended that a light final coat be applied in order to achieve optimum abrasion resistance.

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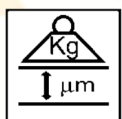


Theoretical Coverage: (ready for use)

6 m²/Lt @ 150 µm dry film thickness
240 ft²/US gal @ 6 mil dry film thickness

Recommended Dry Film Thickness:

125 - 175 µm
5 - 7 (mil)



Dry Film Density:

1.7 g/cm³
14.2 lbs/US gal

Dry Film Weight:

255 g/m² @ 150 µm dry film thickness
0.052 lbs/ft² @ 6 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: ARC2 is compatible with most current types of spray equipment



Equipment Type	Tip Size	Pressure
Airmix	11"	Refer to manufacturer
HVLP Air Spray	1.3 to 1.8 mm	29 to 44 psi (2 to 3 bar)
Pressure Pot	1.0 to 1.2 mm	29 to 44 psi (2 to 3 bar)
Airless	11"	Refer to manufacturer
Air-assisted Airless Electrostatic	11"	Refer to manufacturer
Low Pressure Electrostatic	1.2 or 1.5mm	72 to 87 psi (5 to 6 bar)

Equipment Cleaning:

Clean spray equipment before use and as soon as possible after use. DeSoto® CN20, CN44 or Desoclean™ 45 solvent cleaners are recommended.

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Physical Properties



Colour:

Wide range of colours available



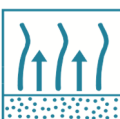
Gloss:

>60 °C using a 60 ° gloss meter



Drying Times 50% R.H.	23 °C (73 °F)	60 °C (140 °F)
Dry to Handle	40 minutes	
Dry to Tape	4 hours	
Hard Dry	6 hours	30 minutes
Dry to Fly	48 hours	
Dry to Overcoat	4 hours (min) 48 hours (max)	
Full Cure	7 days	3 hours

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



Flash Off Time:

15 - 30 minutes between coats (refer to application section of this document)



VOC: (ASTM) (unthinned)

Mixed ready for use	380 g/Lt
ARC2 Base Component	440 g/Lt
ACT34 Activator	270 g/Lt
T74 Thinner	800 g/Lt



Flash Point:

ARC2 Base Component	-18 °C (-0.4 °F)
ACT34 Activator	25 °C (77 °F)
T74 Thinner	-5 °C (23 °F)



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Shelf Life:

ARC2 Base Component
ACT34 Activator
T74 Thinner

24 months in original unopened container
24 months in original unopened container
10 years in original unopened container

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

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Asia Pacific

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

www.ppgaerospace.com

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