AkzoNobel
Aerospace Coatings

10PW20-4
Water Reducible Epoxy Primer

AkzoNobel
Tomorrow's Answers Today

Product Group

Epoxy primer

Characteristics


Product Information

- This chemically cured, water reducible epoxy primer is designed to provide corrosion and chemical resistance over aluminum substrates. It may be topcoated with epoxy or polyurethane.

Components


Curing Solution, Thinner/Reducer

Curing Solution: ECW-104
Thinner: DI water

Specifications


Qualified Product List

EADS (CASA)	Z-12.141
Lockheed Martin	G37.5422
US Military	MIL-PRF-85582 Ty I, Cl C2

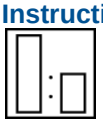
The complete AkzoNobel Aerospace Coatings qualified product list (QPL) can be found at: **www.akzonobel.com/aerospace**

Surface Conditions


Cleaning

- Surface pretreatment is an essential part of the painting process
- Prepare surface per MIL-PRF-85582

Instruction for Use


Mixing Ratio (volume)

3 parts	Base 10PW20-4
1 part	Curing Solution ECW-104
	Thinner DI water (15% by volume maximum)

- Stir or Shake till all pigment is uniformly dispersed before adding curing solution.
- Pour the quart of ECW-104 curing solution into the gallon can of 10PW20-4 base. Place on shaker for two minutes, then remove. Check viscosity. If necessary, further reduce the mixture with DI water additions of 5% by volume of mixed coating up to a maximum of 15%. DO NOT add more than this amount. Allow the reduced material an induction time of 20 minutes before using. The material is now ready for spray application.

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Internet: www.akzonobel.com/aerospace

Induction Time	20 minutes
Initial Spraying Viscosity (25ºC/77ºF)	37 – 60 seconds (reduced 10% by volume with DI water) ISO-Cup 4 20 – 26 seconds(reduced 10% by volume with DI water) Zahn-Cup Signature #2 18 - 25 seconds (reduced 10% by volume with DI water) #4 Ford
Note	The Zahn cup and ISO cup data are provided as application guidelines only. The quality control requierment per MIL-PRF-85582 is the Ford cup viscosity. Viscosity measurements are provided as guidelines only and are not to be used as quality control parameters. Certified information is provided by certification documentation available on request.
Pot Life (25ºC/77ºF)	4 hours.
Dry Film Thickness (DFT)	15 – 25 micron (µm) 0.6 – 1.0 mils

Application Recommendations

Standard suction or pressure spray equipment

Conditions	
Temperature:	15 – 35°C 59 – 95°F
Relative Humidity:	35 – 75%
Note	The quality of the application of all coatings will be influenced by the spray equipment chosen and the temperature, humidity, and air flow of the paint application area. When applying the product for the first time, it is recommended that test panels be prepared in order to identify the best equipment settings to be used in optimizing the performance and appearance of the coating.
Equipment	
Air	1.2 – 1.4 mm nozzle orifice
HVLP	1.2 – 1.4 mm nozzle orifice
Number of coats	Spray a single uniform wet coat to recommended dry film thickness.

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Cleaning of Equipment	Flush equipment with water first. Then use TR-19 to clean residue from equipment. If material dries on equipment, omit water flush and use TR-19 only.

Physical Properties

Drying Times (25 +/- 2ºC / 77 +/- 2ºF, 55 +/- 5% RH)	Full cure	14 days (90% cure in 7 days)
	Dry to topcoat	2 hours
	Dry hard	6 hours
	Accelerated cure	
	Dry to handle	Allow to flash dry at 55°-80°F (13°-27°C) for a minimum of one hour, then 30 – 60 minutes at 120°F – 140°F (49°C – 60°C)
	Full cure	Allow to flash dry at 55°-80°F (13°-27°C) for a minimum of one hour before force curing at 145°-155°F (63°-68°C) for 24 hours.
Theoretical Coverage	20.3 m^2 per liter ready to apply at 18 µm dry film thickness 826 ft^2 per US gallon ready to apply at 0.7 mil dry film thickness	
Dry Film Weight	39.8 g/m^2/25 micron 0.008 lbs/ft^2/1.0 mil	
Volatile Organic Compounds	Max 340 g/l admixed Max. 2.8 lb/gal	
Gloss (60º)	<10 GU	
Color	Light green	
Flash-point	10PW20-4 ECW-104	93°C / 200°F 23°C / 74°F

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Storage

Store the product dry and at a temperature between 5 and 38ºC / 40 and 100ºF per AkzoNobel Aerospace Coatings specification. Store in the original unopened containers. Storage temperature may vary per OEM specification requirements. Refer to container label for specific storage life information.

Shelf life
5 - 38°C
(40 - 100°F)

12 months per AkzoNobel Aerospace Coatings commercial specification. Shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.

Safety Precautions

Comply with all local safety, disposal and transportation regulations. Check the Material Safety Data Sheet (MSDS) and label of the individual products carefully before using the products. The MSDSs are available on request.

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