

# 10P20-44MNF

## High Solids Epoxy Primer



**AkzoNobel**  
Tomorrow's Answers Today

### Product Group

High solids epoxy primer

### Characteristics



Product  
Information

- A high solids urethane compatible, Skydrol<sup>®</sup> resistant primer for application to aircraft exterior surfaces. 10P20-44MNF provides excellent corrosion protection and optimizes the system adhesion of the exterior decoration finish.

### Components



Curing Solution,  
Thinner/Reducer

Curing Solution EC-291B  
Thinner TR-114 (VOC exempt solvent) or  
Thinner TR-102 (for use where VOC control is not required)

### Specifications



Qualified Product  
List

Boeing BMS 10-72 Type IX

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

### Surface Conditions



Cleaning

Surface pretreatment is an essential part of the painting process.

- Surface Pretreatment:
  - Alodine<sup>®</sup> 1000 or Alodine<sup>®</sup> 1200 (per the requirements of MIL-C-5541 and MIL-C-81706)
  - Metaflex<sup>®</sup> SP 1050 or PreKote<sup>®</sup> (per manufacturer's instructions)
- Sol-gel Polysiloxane (in accordance with BMS 10-128).
- Please refer to Eclipse<sup>®</sup> application process standard for detailed instructions. Contact your AkzoNobel Aerospace technical consultant for assistance with this standard.

Optional surface cleaning instructions:

- Wash surface with water/soap solution
- Scotch-Brite<sup>®</sup> abrade, water rinse
- Water break test

Solvent wipe (wipe on / wipe off)

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### Instruction for Use



Mixing Ratio  
(volume)

2 parts Base 10P20-44MNF  
1 part Curing Solution EC-291B  
1 part Thinner TR-114\* or TR-102\*\*

- Stir or shake base until all pigment is uniformly dispersed before adding curing solution and thinner reducer.
- Stir the catalyzed mixture thoroughly
- \*TR-114 is a VOC exempt and HAPS free thinner
- \*\*TR-102 is a non-exempt thinner that raises total VOC



Induction Time

15 minutes



Initial Spraying  
Viscosity  
(25°C/77°F)

13 – 16 seconds Zahn-Cup 2 (2:1:1 mix ratio)  
15 – 25 seconds ISO-Cup 4 (2:1:1 mix ratio)



Note

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  
(25°C/77°F)

4 hours.



Dry Film  
Thickness  
(DFT)

15 – 25 micron (μm)  
0.6 – 0.9 mils



Note

The application characteristics of high solid products differ from conventional products in that the required film thickness will be achieved in fewer passes with the spray gun.

### Application Recommendations



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.

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

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	Equipment	<ul style="list-style-type: none"> <li>- Conventional air Atomizing air pressure: 60 – 70 psi Pot pressure (if applicable): 5 – 20 psi</li> <li>- Air assist airless electrostatic Fluid pressure: 850 – 1000 psi Atomizing air pressure: 65 – 75 psi Tip size: 0.013" (0.33mm) or smaller, preferably .011" (0.28mm)</li> <li>- High pressure air assist electrostatic (i.e., Graco Pro 4500) Fluid pressure: 1800 – 2500 psi Atomizing air pressure: 60 – 75 psi Tip size: 0.009-0.013" (0.23-0.28mm)</li> </ul>
	Number of coats	Spray a single uniform wet coat to a dry film thickness of 15 – 25 micron (µm) (0.6 – 0.9 mils).
	Cleaning of Equipment	Use TR-36, Solvent Cleaning C28/15, Solvent Cleaning 98068 or MEK.

### Physical Properties

	Drying Times (25 +/- 2°C / 77 +/- 2°F, 55 +/- 5% RH)	<table border="0"> <tr> <td>Dry to topcoat</td> <td>3 hrs</td> </tr> <tr> <td>Dry to tape</td> <td>3 – 4 hrs</td> </tr> <tr> <td>Maximum recoat window (at standard conditions) with no reactivation required:</td> <td>48 hrs</td> </tr> </table>	Dry to topcoat	3 hrs	Dry to tape	3 – 4 hrs	Maximum recoat window (at standard conditions) with no reactivation required:	48 hrs
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	Theoretical Coverage	29.2 m <sup>2</sup> per liter per 15.6µm dry film thickness 1190 ft <sup>2</sup> per US gallon at 0.6 mil dry film thickness						
	Dry Film Weight	1.67 g/m <sup>2</sup> /µm 0.009 lbs/ft <sup>2</sup> /mil						
	Rain Erosion Performance	Per the requirements of BMS 10-72, paragraph 8.2.17: "Paint system shall not peel past 0.25 inch from paint leading edges at any interface in the system." Passes, per the testing performed by Boeing Test Services.						



	Gloss (60°)	10-60 GU
	Color	Yellow
	Flash-point	10P20-44MNF 7°C / 45°F EC-291B 7°C / 45°F TR-114 -17°C / 1°F TR-102 7°C / 45°F
	Storage	Store the product dry and at a temperature between 5 and 38°C / 40 and 100°F 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)	24 months (10P20-44MNF, EC-291B & TR-114) per AkzoNobel Aerospace Coatings commercial specification and 24 months for TR-102. 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.

### Issue date: August 2012 – (supersedes July 2011) FOR PROFESSIONAL USE ONLY

**IMPORTANT NOTE** The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given is subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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