Technical Data Sheet

Product Group

Epoxy Primer

Characteristics



Product Information

Qualified Product List

Spray Application (Mix Ratio)

Components



Epoxy Primer

Boeing

Boeing

This polyurethane compatible primer provides excellent chemical and corrosion resistance, optimal adhesion, and is designed for application to aircraft exterior surfaces. 10P20-44MNF is resistant to phosphate ester hydraulic fluids.

BMS 10-72, TY IX, COMP C

BMS 10-72, TY VIII, COMP C

Base	10P20-44MNF
Curing Solution	Curing Solution EC-291B
Thinner	Thinner TR-114
Thinner	Thinner TR-102

Specifications



Boeing BMS 10-72, TY X, COMP C Product specifications are constantly changing, to ensure the most accurate information regarding specifications,

Surface Conditions



-10P20-44MNF can be applied directly over reactivated aged primer when the layer thickness is >10 μm/0.4mils. -Clean aged primer or epoxy/polyurethane finishes and sand/abrade to a uniform matt finish using

grade P320 sandpaper or an aluminum oxide non-woven abrasive pad.

please check our online qualified product list (QPL) at aerospace.akzonobel.com/products).

-When applied over chemically stripped or uncoated metallic substrate, the substrate should be pretreated according to the relevant OEM specification (Airbus SRM 10PEG1 or Boeing AMM/SRM per BAC 5075). -10P20-44MNF is compatible with Metaflex SP 1050 and with BMS 10-128 pretreatments. 10P20-44MNF is also compatible with qualified chromated pretreatments.

-Clean and degrease the surface with an approved cleaning solvent prior to application of the pre-treatment or primer.

-Remove dust and debris with a clean tack rag or equivalent.

Instruction for Use



	Volume
10P20-44MNF	2 parts
Curing Solution EC-291B	1 part
Thinner*	1 part

* Thinner options: Thinner TR-114, Thinner TR-102

-Allow products to acclimate to room temperature before use.

-Stir or shake the base component thoroughly until all pigment is uniformly dispersed before

adding the curing solution.

-Add the curing solution EC-291B and stir the catalyzed mixture thoroughly.

-Add the thinner and stir the catalyzed mixture again thoroughly.

Thinner TR-114 (VOC exempt solvent) or Thinner TR-102 (for use where VOC control is not required).

Induction Time

(25°C/77°F)

Note

Initial Spraying Viscosity



15 minutes

4 hours

13 - 16 seconds EZ Zahn Cup #2

15-25 seconds ISO Cup #4



Pot life (25°C/77°F)

Dry Film Thickness (DFT) μm

13 – 20 µm 0.5 - 0.8 mil

Application Recommendations



Conditions Temperature: **Relative Humidity:**



Equipment Recommendation

Note

10P20-44MNF may be applied in conditions outside the limits shown above. Care must be exercised to ensure a satisfactory result. Please contact your local AkzoNobel Aerospace Coatings representative to determine the appropriate application techniques when environmental conditions fall outside of the recommended range.

15 – 35 °C 59 – 95 °F

35 - 75 %

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.

Spray gun type	Product supply	Fluid Pressure	Nozzle orifice	Product flow	Dynamic air pressure at gun- inlet *
Conventional	N/A	N/A	1.2-1.4 mm	N/A	3-5 bar / 43-73 psi
HVLP / Next Generation	N/A	N/A	1.2-1.4 mm	N/A	2-2.5 bar / 29-36 psi**
Air Atomizing (electrostatic)	N/A	N/A	1.2-1.5 mm	230-350 mL/min	4-5 bar / 58-73 psi
Pressure Atomizing (electrostatic)	N/A	65-75 bar / 1.02 kpsi, 25-35 bar / 0.43 kpsi	0.009 inch/60°, 0.013 inch/60°	260-300 mL/min	4-4.5 bar / 58-65 psi



Number of Coats Spray a single uniform wet coat to a dry film thickness of 13-20 µm (0.5-0.8 mil).





Note

Use TR-36, Solvent Cleaning C28/15, Solvent Cleaning 98068 or MEK.

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.

Physical Properties

AkzoNobel Aerospace Coatings

1 East Water Street, Waukegan, IL 60085, USA - Phone (847) 623 4200, Rijksstraatweg 31, 2171 AJ Sassenheim, The Netherlands - Phone (31) 71308 2905 Mail: aerospace@akzonobel.com / Online: aerospace.akzonobel.com

	Drying Times		25°C/77°F, 55% RH	
		Dry to Topcoat	3 hrs	
		Dry to Tape	3-4 hrs	
		Dry to Sand	4 hrs	
		Recoatable Maximum	48 hours at standard conditions	
		If a drying time of 48 hours is exceeded, recondition the primer to a uniform matt surface with grade P320 sandpaper or an aluminum oxide non-woven abrasive pad. Check the relevant specification to determine if reapplication of 10P20-44MNF is necessary.		
and the	Note	Dry times and recoat times v	vill vary depending on combinations of temperature, humidity and airflow.	
M ²	Theoretical Coverage	33.0 m ² per liter ready to apply at 13 μ m dry film thickness. 1345 ft ² per US gallon ready to apply at 0.5 mil dry film thickness.		
<u>kg</u> <u>l</u> μm	Dry Film Weight	1.69 g/m²/µm 0.0088 lbs/ft²/mil		
voc	Volatile Organic Compounds	Diluted with TR-114: 590 g/L / 4.92 lbs./gal. 350 g/L / 2.92 lbs./gal - excluding exempt solvents acc. to US EPA.		
		Diluted with TR-102: 512 g/L / 4.27 lbs./gal. 474 g/L / 3.96 lbs./gal - exclu	uding exempt solvents acc. to US EPA.	
GU	Gloss (60°)	3 – 30 GU		
۲	Color	Yellow		
	Flash Point	10P20-44MNF	7°C / 45°E	
		Curing Solution EC-291B	7°C / 45°F	
V		Thinner TR-114	-17°C / 1°F	
		Thinner TR-102	7°C / 45°F	
\bigcirc	Storage	Store the product dry and at a temperature between 5 and 38°C / 41 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 (41 - 100°F)	10P20-44MNF	24 months	
	,	Curing Solution EC-291B	24 months	
		Thinner TR-114	24 months	
		Thinner TR-102	24 months	

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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 MSDS's are available on request.

Revision date: October 2024 (supersedes October 2021) - 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. Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel