20P20-3

Technical Data Sheet

Product Group

Characteristics



Product Information

Qualified Product List

Surface Preparation/

Components

Specifications



Surfacers

A chemically cured high build polyurethane surfacer designed for use as an intermediate primer with good filling properties and easy sanding characteristics.

Base	20P20-3
Curing Agent	Curing Solution PC-232
Activator	IM-253
Thinner	Thinner TR-102
Thinner	Thinner TR-114
Cessna	CMFS039, TY II
Embarer	MEP 10-070
Gulfstream Aerospace	GMS 5008

McDonnell Douglas MDM 15-1095

Product specifications are constantly changing, to ensure the most accurate information regarding specifications, please check our online qualified product list (QPL) at aerospace.akzonobel.com/products.

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Surface pretreatment is an essential part of the painting process. -20P20-3 may be applied directly over properly abraded and cleaned composite surfaces. -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. -Clean and degrease the surface with an approved cleaning solvent, -Remove dust and debris with clean tack rags just prior to application of the primer.

Instruction for Use

Surface Conditions

Cleaning



Spray Application (Mix Ratio)

	Volume	Weight
20P20-3	3 parts	100 parts
Curing Solution PC-232	1 part	20 parts
Activator*	See Remarks part	See Remarks
Thinner*	0-1 part	0-24 parts

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* Activator options: IM-253

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

-Allow products to acclimatize 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 PC-232 and stir the catalyzed mixture thoroughly. -Add the thinner, if required, and stir the catalyzed mixture again thoroughly.

OPTIONAL: Up to 1 part TR-102 or TR-114 may be added to improve flow. One ounce of IM-253 may be added to one gallon kit for faster cure.

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	Induction Time	Not Applicable.
∏ s	Initial Spraying Viscosity (25°C/77°F)	19-27 seconds Ford #4 (without thinner)
and the	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 (50 seconds max. Ford #4)
and the	Note	Pot life will be shortened with the addition of IM-253, depending on the ambient temperature and humidity.
1 μm	Dry Film Thickness (DFT)	38 – 76 μm 1.5 – 3 mils

Application Recommendations





Equipment Recommendation



Note



Note

 Temperature:
 15 – 35 °C

 59 – 95 °F

 Relative Humidity:
 35 – 75 %

20P20-3 may be applied in conditions outside of the limits shown above. Care must be exercised to ensure a satisfactory result. Please contact your local AkzoNobel Aerospace Coatings representative to determine the proper application techniques when environmental conditions fall outside of the recommended range.

Spray gun type	Product supply	Fluid Pressure	Nozzle orifice	Product flow	Dynamic air pressure at gun-inlet *
Conventional	N/A	N/A	1.4 mm	N/A	3-5 bar / 43-73 psi
HVLP / Next Generation	N/A	N/A	1.4 mm	N/A	2-2.5 bar / 29-36 psi**
Air Atomizing (electrostatic)	N/A	N/A	1.3-1.5 mm	260-300 ml/min	4-4.5 bar / 58-65 psi
Pressure Atomizing (electrostatic)	N/A	25-35 bar / 0.4- 0.5k psi	0.013 inch/60°	260-300 ml/min	4-4.5 bar / 58-65 psi

*Measured with an open trigger.

**General advice to meet the HVLP / next-generation spray gun requirements. Please validate with your local authorities.

Apply 20P20-3 primer in one to two full wet coat applications to a recommended dry film thickness of $38-75 \ \mu m$ (1.5-3 mils). Apply a single wet coat followed by 15 minutes flash off time at ambient conditions. Apply a second wet coat. Repeat this if additional coats are needed. Do not bake this coating as solvent pop will appear.

If ambient temperature is above 90°F (32°C), add 1 pint of TR-114 to every mixed gallon to increase pot life and flow-ability (if thinner was not added previously).

Flash-off time refers to the elapsed time between the start of the first coat application and the start of the second coat application. Paint should have very little transfer when touched to indicate the paint is ready for application of the next coat.

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

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20P20-3



Dry times and recoat times will vary depending on combinations of temperature, humidity, and airflow.

Cleaning of Equipment

Use TR-19 or MEK.

Physical Properties

	Drying Times			
(~)		Dry to Touch	25°C/77°F, 55% RH	
]	Dry to Sand	2 hours (depending on film thickness)	
		Recoatable Minimum	2 hours	
		Recoatable Maximum	24 hours	
۵	Note	Dry time will be shortened with the addition of IM-253, depending on the ambient temperature and humidity.		
If a drying time of 24 hours is exceeded, recondition the primer to a uniform matt surface sandpaper or an aluminum oxide non-woven abrasive pad.			urs is exceeded, recondition the primer to a uniform matt surface with grade P320 oxide non-woven abrasive pad.	
M ²	Theoretical Coverage	19.5 m² per liter ready to apply at 25 μm dry film thickness 795 ft² per US gallon ready to apply at 1 mil dry film thickness		
Kg Iμm	Dry Film Weight	51.5 g/m²/25 μm .01 lbs/ft²/1 mil		
voc	Volatile Organic Compounds	Max 420 g/l Max 3.5 lbs/gal		
and	Note	VOC with TR-102 is 490 g/l (4.08 lbs/gal). The use of TR-114 will maintain the VOC at 420 g/l or less.		
GU	Gloss (60°)	10 – 20 GU		
3	Color	Cream / Off White		
	Flash Point	20P20-3	- 4°C / 25°F	
		Curing Solution PC-232	16°C / 60°F	
	1	IM-253	43°C / 109°F	
		Thinner TR-102	7°C / 45°F	
		Thinner TR-114	34°C / 1°F	

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Shelf life 5 - 38°C (41 - 100°F)	20P20-3	18 months
,	Curing Solution PC-232	18 months
	IM-253	18 months
	Thinner TR-102	18 months
	Thinner TR-114	24 months

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: March 2024 (supersedes September 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 of ro 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 current prior to using the product. Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel