



Product Training

Undercoats

A brand of

 **BASF**

We create chemistry



Undercoats

Ensuring functionality

Film thicknesses have a direct impact on the quality and the durability of the refinish paintwork. Products applied to an excessive film thickness will cause cracking of the paint film surface, chalking, and loss of gloss and/or sinkage.

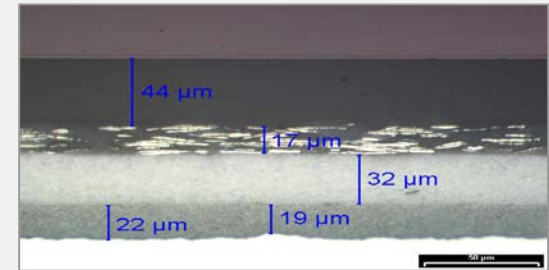
If the products are applied too thinly, this may also cause delamination, increased risk of chipping, cracking of the film surface, paint film sinkage and fading of the finish coat.



Undercoats

Film thicknesses measured in microns (μm)

Paint system 115 μm



By comparison: a human hair, approx. 70 μm



The film thickness in μm indicates the measured value that is used to describe the thickness of one or several coats of the paint products.

1 μm equals one-thousandth of a millimetre



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The application of the optimum film thickness depends on various factors:

1. Type of spraygun and gun and nozzle setup

The spraygun type – HVLP or compliant, depending on the product being applied – and the correct gun and nozzle setup are the most important factors in reaching the prescribed film thickness.

2. Product adjustment

The prescribed hardeners and reducers, and the quantities to be added, must be strictly respected. The temperature table is helpful in this respect.



Undercoats

Primer filler/surfacer

Different refinishing procedures require different types of primer filler/surfacer:

Wet-on-wet surfacer – for coating undamaged new panels

Sanding filler – for use on repaired areas

Sandable primer fillers serve to fill sanding scratches (P240 grit) and to smooth out transition zones (body filler – substrate – old paintwork).



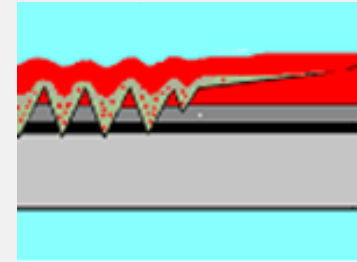
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Preparation:

Before applying primer filler, sand the substrate with an orbital sander using P80 – P150 grade abrasives, and prime it accordingly.



If the mineral grit is too coarse, the sanding scratches will be too deep. As a result, the primer filler will be applied too heavily: The recommended drying times will then be too short, and sand scratch swelling will be the result.





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The adjacent area must be flatted down sufficiently (P240-P400).

The substrate must be free of dust and dry.

The primer (a thin coat) must be flashed off for 10 minutes.





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Application:

The primer filler will be applied in two coats.

The first spray coat serves primarily for sealing the substrate; it should therefore be sprayed thinly (barrier coat).

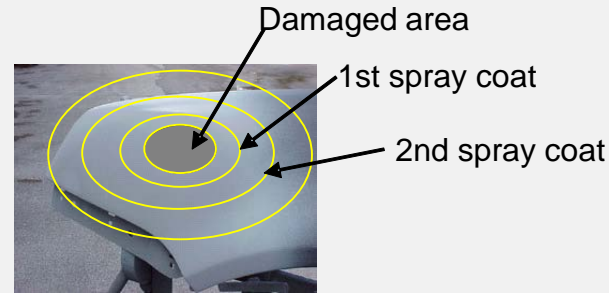
This will keep the solvent contained in the subsequent filler coats from penetrating into the old paintwork, thus preventing swelling





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Second coat: These are the proper primer filler/surfacer coats. Once the first coat has flashed off sufficiently (until matt), the second, coherent coat will be applied.



Be sure to spray each coat of primer filler/surfacer over an area about one width of a hand larger than the previous one



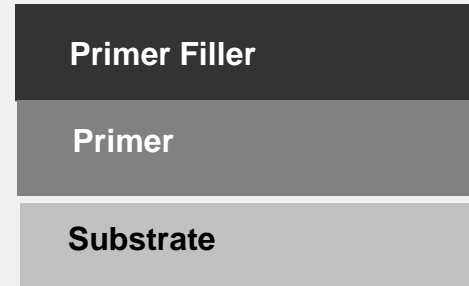
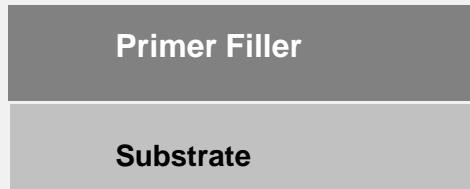
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If an additional spray coat results in a film thickness exceeding 70 μm , you will need to allow longer flash-off times, and the drying time must also be extended accordingly. The maximum film thickness is 150 μm .



Undercoats

2-Layer and 3-layer Primer/Primer filler





Possible combination



Not applicable



Undercoats

Combination of baslac hardeners and reducers in baslac undercoats

Material	50-10	50-15	56-20	57-10	55-10	60-10	60-20	60-30	60-40
12-20			X						
20-24	X	X				X	X	X	X
20-34	X	X				X	X	X	X
20-94	X	X				X	X	X	X
21-10									
25-30					X		X	X	
27-10				X		X	X	X	



Undercoats

20-24 Primerfiller

20-24 is an efficient HS Primerfiller with a high solids content and fast drying with good weathering resistance and high quality result / appearance.

20-24 2 K Primerfiller – non-sanding version

20-24 2 K Primer filler can be used for non sanding filler as wet-on-wet surfacer with a short flash off time and no sanding.

It is very safe to spray and has a good finish and weathering resistance.





Undercoats

20-34/20-94 2K Primerfiller white/black

20-34/20-94 2K Primerfiller is an efficient HS primer filler with high solids content and fast drying with good weathering resistance and high quality result/appearance.

This primerfiller can be used for baslac topcoat 30- and baslac basecoat 35-.

These primerfillers can be mixed with each other to achieve different grey shade colors.



Undercoats

25-30 Primerfiller EP

25-30 Primerfiller EP is a primer filler for wet and dry sanding and is a corrosion/adhesion promoter with high corrosion protection. It has a high finish / appearance especially if force dried. Air drying at a minimum temperature of 15°C.





Undercoats

27-10 2K Wash Primer

27-10 2K is a two-pack Primer/Primer Filler with good anti-corrosive properties, for easy and quick sanding. It is used as adhesion primer for use on aluminium and galvanised steel sheet.





Undercoats

21-10 1K Plastic Primer

21-10 is a multi-purpose adhesion promoter which is suitable for all paintable plastics parts on cars.

It has an unlimited Potlife and is easy and safe to spray with a short flash off time


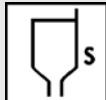






Undercoats

2K Primerfiller 20-24

1. Application

	Mixing ratio 4 : 1 : 1	100% by vol. 25% by vol. 25% by vol.	20-24 50-10, -15 60-10, -20, -30, -40
	Spray viscosity DIN 4 at 20°C	20 – 24 s	
	Potlife	1 h / 20°C	
	Spray gun	1.6 – 1.8 mm	
	Number of spray coats Film thickness	2 50 – 70 µm	










Undercoats

2K Primerfiller 20-24

2. Drying / sanding

	Drying at 20°C at 60°C	3 h 30 min.
	Infrared (short wave) (medium wave)	8 min. 10 – 15 min.
	Dry sanding Orbital sander	P 400
	Wet sanding	P 800










Undercoats

2K Primerfiller 20-24 Application of high film builds

1. Application

	Mixing ratio 4 : 1 : 1	100% by vol. 25% by vol. 25% by vol.	20-24 50-10, -15 60-10, -20, -30, -40
	Spray viscosity DIN 4 at 20°C	20 – 24 s	
	Potlife	1 h / 20°C	
	Spray gun	1.6 – 1.8 mm	
	Number of spray coats Film thickness	3-4 100- 200 µm	









Undercoats

2K Primerfiller 20-24

2. Drying / sanding






	Drying at 20°C at 60°C	16 h 40 min.	
	Dry sanding Orbital sander	P 400 – P500	
	Wet sanding	P 800	



Undercoats

2K Primerfiller 20-24 Process for non-sanding filler

1. Application

	Mixing ratio 1 : 1 : 1:1	100% by vol. 100% by vol. 100% by vol. 100% by vol.	20-24 30-S 00 50-10 60-10, -20, -30, -40
	Spray viscosity DIN 4 at 20°C	16 - 18 s	
	Potlife	2 h / 20°C	
	Spray gun	1.2 – 1.4 mm	
	Number of spray coats Film thickness	2 Approx. 20 - 35 µm	





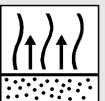





Undercoats

2K Primerfiller 20-24 Process for non-sanding filler





2. Drying / sanding

	Drying at 20°C at 60°C	3 h 30 min.
	Infrared (short wave) (medium wave)	8 min. 10 – 15 min.
	Dry sanding Orbital sander	P 400
	Wet sanding	P 800
	Flash off at 20°C	15 – 20 min.



Undercoats





2K Primerfiller white/black 20-34/-94

1. Application		
	Mixing ratio 4 : 1 : 1	100% by vol. 20-34 / 94 25% by vol. 50-10, -15 25% by vol. 60-10, -20, -30, -40
	Spray viscosity DIN 4 at 20°C	20 – 24 s
	Potlife	1 h / 20°C
	Number of spray coats Film thickness	2 50 – 70 µm

Undercoats

2K Primerfiller white/black 20-34/-94






2. Drying / sanding

	Drying at 20°C at 60°C	3 h 30 min.
	Infrared (short wave) (medium wave)	8 min. 10 – 15 min.
	Dry sanding Orbital sander	P 400
	Wet sanding	P 800

Undercoats

2K Primerfiller EP 25-30



	1. Application Mixing ratio 4 : 1 : 2	100% by vol. 25% by vol. 50% by vol.		25-30 50-10 60-20, -30,					
	 Spray viscosity DIN 4 at 20°C	18 – 20 s							
	Potlife	8 h / 20°C							
	 Spray gun	<table border="1"> <thead> <tr> <th>Primerfiller</th> <th>Wet on wet</th> <th>Primer</th> </tr> </thead> <tbody> <tr> <td> 2 1.6 – 1.9 mm </td> <td> ½ + 1 1.3 – 1.4 mm </td> <td> 1 1.6 – 1.9 mm </td> </tr> </tbody> </table>		Primerfiller	Wet on wet	Primer	2 1.6 – 1.9 mm	½ + 1 1.3 – 1.4 mm	1 1.6 – 1.9 mm
	Primerfiller	Wet on wet		Primer					
2 1.6 – 1.9 mm	½ + 1 1.3 – 1.4 mm	1 1.6 – 1.9 mm							
 Number of spray coats Film thickness	2 50 – 70 µm								

Undercoats

2K Primerfiller EP 25-30



2. Drying / sanding

Primerfiller

Wet on wet

Primer



Drying at 20°C
at 60°C

8 h
30 min.

20 min.

10 – 20 min.



Dry sanding
Orbital sander

P 400



Wet sanding

P 800









Undercoats

2K Wash Primer 27-10

2. Flash-off / drying / sanding

Primer filler application






	Flash off at 20°C	approx. 10 min..
	Drying at 20°C at 60°C	60 min. 20 min
	Infrared (short wave) (medium wave)	3 min. 5 – 10 min.
	Wet sanding	P 800



Undercoats

1K Plastic Primer 27-10

1. Application

	<p>Spray viscosity DIN 4 at 20°C</p>	<p>ready for use</p>	
	<p>Spray gun</p>	<p>1.3 – 1.4 mm</p>	
	<p>Number of spraycoats Film thickness</p>	<p>1 – 2 thin, but coherent coats approx. 10 µm</p>	
	<p>Flash off at 20°C</p>	<p>15 min. before filler application</p>	