

Description

Colorbuild Plus consists of six colored primers which, when mixed in proper combination with each other, achieve colors closely resembling the most popular topcoat colors. Depending on the mixing ratio utilized, Colorbuild Plus can be used as either a sanding surfacer or wet on wet primer surfacer.

Sanding (C	Conventional)	
	 Colorbuild Plus Hardener P25 Plus Reducers 	
Ä	Use Sikkens measuring stick 5 Orange	
> 11	Spray gun set-up: 1.5-2.0mm	Application pressure: 1.7-2.2 bar at the air inlet HVLP max 0.6-0.7 bar at the air cap
	2-3 x 1 coat	
<u>/†/†/</u>	Between coats: 4-6 minutes at 20°C	Before curing: 4-6 minutes at 20°C
	4 hours at 20°C 3 coat application	30 minutes at 60°C
Ľ	Final sanding step: P500 See TDS S8.06.02	
	Recoatable with all Sikkens topcoats	
	Use suitable respiratory protection	

Akzo Nobel Car Refinishes recommends the use of a fresh air supply respirator.



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Read complete TDS for detailed product information

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Wet-on-wet (Conventional)

	3 Colorbuild Plus1 Hardener P251 Plus Reducers		
A	Use Sikkens measuring stick 9 Grey		
→1	Spray gun set-up: 1.3-1.5mm	Application pressure: 1.7-2.2 bar at the air inlet HVLP max 0.6-0.7 bar at the air cap	
	1 coat		
<u>/†/†/</u>	Flash-off time: 15-20 minutes at 20°C	Recoat within: 4 hours at 20°C	
	Recoatable with all Sikkens topcoats		
	Use suitable respiratory protection		

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Suitable substrates	
Existing finishes	Glass Reinforced Polyes
Steel	Polyester bodyfillers
Aluminium	Sikkone Polycurfacor

Aluminium Galvanized steel OEM electro coat Glass Reinforced Polyester laminates (GRP) Polyester bodyfillers Sikkens Polysurfacer Primer Surfacer EP Sikkens Washprimer 1K CF Sikkens 1K All Plastics Primer

	Colorbuild Plus Sanding / non sanding	Colorbuild non sanding in combination with Plastic Additive
Direct to steel	Yes 1)	Yes 1)
Direct to aluminum	Yes 1)	No
Direct to galvanized steel	Yes 1)	No
Direct to new plastic parts	No	Yes 2)
Direct to unsanded OEM electrocoat	Yes 3)	Yes 3)
Sanded existing finishes	Yes 3)	Yes 3)

- 1) Colorbuild Plus will provide adequate adhesion if applied directly to all metals. However, it is advised to use Sikkens Washprimer 1K CF in the following cases:
- a. When the system is required to meet the highest standard
- b. Repairs that requires an extensive metal priming such as complete panel
- Only in combination with Colorbuild Plus Plastic Additive Only when plastic parts are properly pretreated, sanded and cleaned On all plastics, with the exception of pure PP, pure PE and PP-E/P blends. When mixed with Colorbuild Plus Plastic Additive no plasticizer is needed
- 3) Surfaces should be thoroughly cleaned and degreased

Products and additives



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Products	Colorbuild Plus; White-Black-Red-Blue-Green-Yellow Colorbuild Plus; Dark Grey	
Hardeners	Hardener P25	
Reducers	Plus Reducer Medium Plus Reducer Slow Plus Reducer Extra Slow	
Additives	Elast-O-Actif: Colorbuild Plus Plastic Additive:	to elasticize Colorbuild Plus. See S8.06.03 for non sanding application on plastics. See S8.06.03

Basic raw materials

Colorbuild Plus: Acrylic and polyester resins P25 Hardeners: Polyisocyanate resin Plus Reducers: Solvents

Surface preparation



Surface cleaning; remove any surface contamination prior to sanding using Sikkens M700 or M600 surface cleaner.

Pre-clean the surface with warm water and detergent, rinse sufficiently with clean water.



Sanding; final dry sanding steps; P220 - P320 Direct applicable on non-sanded, thoroughly cleaned and degreased rigid OEM electro-coated parts. Sikkens Polyester bodyfillers and Polysurfacer; finished with; P180 – P220 Featheredge sanding for spot repair, finish outer area with P400

Surface cleaning; remove any surface contamination prior to Colorbuild application using Sikkens M700 or M600 surface cleaner. Where bodyfiller is exposed, avoid contact with water or waterborne degreaser (e.g. M200).

Stir before use



Stir each Colorbuild Plus color thoroughly before mixing

For detailed surface preparation see TDS S8.06.02

Mixing Colorbuild Plus colors

With the exception of the Black and White, Colorbuild Plus colors **must always** be intermixed according to the mixing formulas to achieve the desired color, layer thickness and coverage prior to the addition of hardener, activator or thinner. Colorbuild Plus Black and White can be mixed in each mixing ratio, see Quick-Mix table below



Black - White		
0 : 100	White	
1 : 5	Light grey	
1:2	Medium light grey	
1:1	Medium grey	
2 : 1	Medium dark grey	
5 : 1	Dark grey	
100 : 0	Black	

Colorbuild Plus mixtures must be stirred thoroughly before adding Colorbuild Plus Hardener. Stir thoroughly once more before adding additional reducer (if required).

Under the hood colors

In the engine compartment of some cars a matt to semi gloss finish is present. More and more car brands utilize this finish, so-called under the hood colors. Colorbuild Plus colors can be used to imitate such colors. Addition of Autoclear Expert HS helps to reach required semi-gloss level.

Make a mixture of Colorbuild Plus color: Autoclear Expert HS or Autocryl Plus A065; 80:20 by weight



Under the hood Colorbuild Plus mixture Hardener P25 or P35 **Plus Reducers**

Mixing

Sanding:

1

4

1 1

- Colorbuild Plus P25 Hardener
- **Plus Reducer**

Non sanding (wet-on-wet):

- Colorbuild Plus 3
- 1 P25 Hardener
- 1 **Plus Reducer**

Plastic application (Non Sanding):

- **Colorbuild Plus** 3
- P25 Hardener 1
- 1 **Colorbuild Plus Plastic Additive**



Important Notes:

- Colorbuild Plus Non Sanding (wet-on-wet) can be used directly over virgin untreated plastics when Colorbuild Plus Plastic Additive is used. See TDS S8.06.03 for recommended preparation.
- Colorbuild Plus when mixed with Colorbuild Plus Plastic Additive can also be applied as a (wet-onwet) sealer directly over mild steel. For optimum adhesion it should be preceded by Washprimer 1K CF. When applied over Aluminium and galvanized steel, it <u>must</u> be preceded by Washprimer 1K CF.
- Non sanding (wet-on-wet) version should be applied over suitable plastic primer for optimum adhesion properties. (1K All Plastics Primer)
- Sanding Version should be applied over Plastic Primer (1K All Plastics Primer) for optimum adhesion and properties.
- Colorbuild Plus (wet-on-wet) may be directly applied on non-sanded, thoroughly cleaned and degreased rigid OEM electro-coated parts
- Under the hood mix can be re-coated with Basecoat Clearcoat (or) Single Stage top coats.

Flexible parts

<u>Sanding:</u> Once elasticized to the required level, Colorbuild Plus can be applied on plastic parts. All flexible plastic parts should be pre-coated with a suitable plastic primer (in the case of unprimed plastic), or OEM finish. See TDS.S8.06.03.

Non sanding: Colorbuild Plus with Plastic Additive can be applied as non-sanding primer directly on all plastics with the exception of pure PE, pure PP and PP-E/P blends. See TDS.S8.06.03.

Spray gun set-up / application pressure			
	Spray gun	Fluid tip-set-up	Application pressure
	Gravity feed	<u>Sanding</u> 1.5-2.0 mm	1.7-2.2 bar at the spray gun air inlet HVLP max 0.6-0.7 bar at the air cap
T	Gravity feed	<u>Wet on wet</u> 1.3-1.5 mm	1.7-2.2 bar at the spray gun air inlet HVLP max 0.6-0.7 bar at the air cap

For maximum build use large fluid tip and lower application pressure.

Pot-life			
P25 Plus Reducers	1 hour	at 20°C	
Application			





Sanding; Apply one coat over the total sanded area. Next apply the 2nd and 3rd coat within each preceding coat. Where a full panel application is required apply 2-3 coats over the total panel dependent on the required film build.



Allow each coat to flash-off naturally until the surface is completely matt; this also supports to achieve higher film build. Do not force-dry by air support. Flash-off between the coats is dependent on ambient temperature, applied layer thickness and airflow. For maximum build use large fluid tip and lower the application pressure.

Wet on wet (non sanding/surfacer)

Apply 1 full wet coat over the total area.

Drying time sanding



4 hours at 20°C 30 minutes at 60°C Drying times relate to recommended application (3 coats) and object temperature



Allow 5 minutes flash-off prior to infra red curing The panel must not reach a temperature above 100°C while curing. For additional infra red drying information; see TDS S9.01.01

Flash-off time wet-on-wet



Allow for a minimum flash-off time of 15-20 minutes at 20°C prior to topcoat application. Apply topcoat within 4 hours at 20°C. Should this maximum time be exceeded, abrade the surface with P500 dry or P1000 wet sanding paper.

Denibbing wet-on-wet

For minor defects (e.g. dust) Colorbuild Plus can be denibbed with either P500 dry or P1000 wet sanding paper Allow a minimum of 30 minutes at 20°C when using Plus reducer slow before denibbing. After a drying time of longer than 4 hours thorough sanding is necessary!

Final sanding



Final sanding step P500

Initial sanding steps may be executed with a coarser sanding grit; P360 - P400 Respect a maximum 100 sanding grit step difference or less throughout the sanding procedure. For detailed surface preparation see TDS S8.06.02



Final sanding step P1000 Initial sanding steps may be executed with a coarser sanding grit P600 - P800 Respect a maximum 200 sanding grit step difference or less throughout the sanding procedure. For detailed surface preparation see TDS S8.06.02



Surface cleaning; remove any surface contamination prior to the application of the topcoat using Sikkens M700 or M600 surface cleaner. In case of Autowave 2.0 application also clean with M200.





Recoatable with

Autowave 2.0 Autobase Plus Autocryl Plus Autocryl Plus LV

Film thickness Sanding per coat 40 - 45 μm 3 coats 120 - 130 μm Wet-on-wet 1 coat 25 - 30 μm

Theoretical coverage

Sanding:Ready for use mixture at 1 μ m dry film thickness: 400 m²/literWet-on-wet:Ready for use mixture at 1 μ m dry film thickness: 389 m²/liter

The practical material usage depends on many factors i.e. shape of the object, roughness of the surface, application techniques, pressure and application circumstances.

Cleaning of equipment

Sikkens Solvents or Guncleaners

VOC

The VOC content of this product in ready to use form is 553 g/liter for the sanding version and 570 g/liter for the wet-on-wet version, 572g/liter for elastisized version, 589g/liter with Colorbuild Plus Plastic Additive and 562g/liter for the under the hood version.

Product storage

Product shelf-life is determined when products are stored unopened at 20°C. Avoid extreme temperature fluctuation. Product shelf life data see TDS S9.01.02





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FOR PROFESSIONAL USE WITH SUITABLE HS&E EQUIPMENT

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