

FOR PROFESSIONAL USE ONLY

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 (Eco-Logical)



3 Colorbuild Plus

1 Colorbuild Plus Hardener Sanding

+10% Colorbuild Plus Activator Sanding



Use Sikkens measuring stick



Grev



Spray gun set-up: Application pressure:

1.5-2.0 mm 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



Between coats: Before curing:

4-6 minutes at 20°C 4-6 minutes at 20°C



1 ½ hours at 20°C 45 minutes at 40°C 30 minutes at 60°C

3 coat application



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

Read complete TDS for detailed product information



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Wet on wet (Eco-Logical)



100 Colorbuild Plus

25 Colorbuild Plus Hardener Non Sanding

35 Colorbuild Plus Activator Non Sanding



Use Sikkens measuring stick





Spray gun set-up: 1.3-1.5 mm

Application pressure: 1.7-2.2 bar at the air inlet

HVLP max 0.6-0.7 bar at the air cap



1 coat



Flash-off time:

Recoat within:

15 minutes at 20°C

24 hours at 20°C



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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 non-sanding (sealer) primer surfacer.

Suitable substrates

Existing finishes Glass Reinforced Polyester laminates (GRP)

Steel Polyester bodyfillers
Aluminium Sikkens Polysurfacer
Galvanized steel Primer Surfacer EP

OEM electro coat

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	Yes 3)	Yes 3)
electrocoat		
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
- 2) 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

Product and additives

Products Colorbuild Plus; White-Black-Red-Blue-Green-Yellow

Colorbuild Plus; Dark Grey

Hardeners Colorbuild Plus Hardener Sanding

Colorbuild Plus Hardener Non Sanding

Activators Colorbuild Plus Activator Sanding Fast; spot and panel repairs.

Colorbuild Plus Activator Sanding Slow; standard application on larger surfaces and at higher temperatures

Colorbuild Plus Activator Non Sanding; for non sanding / wet-on-wet application.

Additives Elast-O-Actif: to elasticize Colorbuild Plus. See TDS S8.06.03

Colorbuild Plus Plastic Additive: for non sanding application on plastics. See TDS S8.06.03





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Basic raw materials

Colorbuild Plus: Acrylic and polyester resins Colorbuild Plus Hardeners: Polyisocyanate resin Colorbuild Plus Activators Sanding: Activated solvents

Surface preparation



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

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

For detailed surface preparation see TDS S8.06.02



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

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.

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 Activator / reducer (if required)



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Under the hood colors



In the engine compartment of some cars a matt 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 by the addition of Autoclear LV Superior Fast (by weight) to reach the required semi-gloss level.

Make a mixture of Colorbuild Plus color: Autoclear LV Superior Fast (by weight) 70:30



70	Colorbuild Plus color	100	Under the hood Colorbuild Plus mixture
30	Autoclear LV superior Fast (by weight)	25 35	Colorbuild Plus Hardener Non Sanding Colorbuild Plus Activator Non Sanding

Mixing



Sanding:

3 Colorbuild Plus

1 Colorbuild Plus Hardener Sanding

10% Colorbuild Plus Activator Sanding

Non sanding (wet-on-wet):

Plastic application (wet-on-wet)

100	Colorbuild Plus	100	Colorbuild Plus
25	Colorbuild Plus Hardener Non Sanding	25	Colorbuild Plus Hardener Non Sanding
35	Colorbuild Plus Activator Non Sanding	35	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-on-wet) sealer directly over mild steel. For optimum adhesion it should be preceded by Washprimer 1K CF.
 When applied over Aluminium and galvanized steel, it must be preceded with 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.
- It is allowed to use 10 % Autoclear LV Superior Fast (or) Elast-O-Actif on total mixture to avoid overspray issues.
 The mixing ratio to be followed is 100:25:35:10 (AC LV Superior Fast (or) Elast-O-Actif)



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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 PP, pure PE and PP-E/P blends. See TDS.S8.06.03.

Spray gun set-up / application pressure



Spray gun Fluid tip-set-up Application pressure

Sanding

Gravity feed 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

Wet on wet 1.3-1.5 mm

Gravity feed 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 the application pressure.

Pot-life

Colorbuild Plus Activator Sanding Extra Fast and Fast Colorbuild Plus Activator Sanding Slow Colorbuild Non Sanding:

35 minutes at 20°C 1 hour at 20°C 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



1½ hours at 20°C 45 minutes at 40°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



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Flash-off time wet-on-wet



Allow for a minimum flash-off time of 15 minutes at 20°C prior to topcoat application. Apply topcoat within 24 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. After a drying time of longer than 24 hours thorough sanding is necessary!

Final sanding



Final sanding step P500

- Initial sanding steps may be executed with a coarser sanding grit; P320 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

- o 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 an appropriate surface cleaner. Sikkens M700 or M600. 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 - 60 μm
	3 coats	120 - 180 µm
Wet-on-wet	1 coat	25 - 30 μm





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Theoretical coverage

m²/liter

Sanding: Ready for use mixture at 1 µm dry film thickness: **Wet-on-wet**: Ready for use mixture at 1 µm dry film thickness:

400 389

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

Viscosity

Sanding mixture:

DIN cup no.4

17-22 sec at 20°C

Non Sanding @ 100:25:35

DIN cup no.4

18-24 sec at 20°C

Cleaning of equipment

Sikkens Solvents or Guncleaners

VOC

The EU limit value for this product (product category: IIB. c) in ready to use form is max. 540 g/liter of VOC. The VOC content of this product in ready to use form is max. 540 g/liter.

Product storage

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

o Product shelf life data see TDS S9.01.02

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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 advices given are 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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