



Technical Data Sheet



[Z] ZowoPlast® 2450 TopCoat OneLayer COLOR

Product Description

Product Type

Water-based PVCu one-layer top coat

- » Single-component
- » Completely free of pyrrolidone (e.g. NEP, NMP) and triethylamine
- » One-layer coating
- » Outstanding weathering resistance
- » Excellent scratch-resistance
- » Anti-Heat formulation for lower substrate heating
- » By adding [Z] ZowoSmart® EffectPigment Silver, metallic colors can be made

Area of Application

Profiles / elements for windows, doors and further building parts made from PVCu and other tested and approved plastic parts for interior and exterior use.

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Base of Binder

Combination of polyurethane and acrylate

Pigments

Titanium dioxide and organic and inorganic pigments

Color

- » RAL-colors and special colors based on [Z] ZowoPlast® 2450 base C.
- » By adding 7% [Z] ZowoSmart® EffectPigment Silver (85g / liter lacquer) metallic colors, matching the base F colors, can be made. Other quantities of use are listed in the technical datasheet of [Z] ZowoSmart® EffectPigment Silver.

Gloss Level

Ultra-matt, dull matt, matt or silk-gloss

Density

1,0 to 1,2 g/ml depending on the color

Viscosity

Thixotropic setting

Processing Instructions

Pretreatment of Substrate

If necessary, tape residues and coarse soiling must be removed in advance using [Z] ZowoPlast® 1120 HydroCleaner or [Z] ZowoPlast® 1130 SolvCleaner.

Standard pretreatment of substrate

- » Rub the surface to be painted with a cloth, soaked in [Z] ZowoPlast® 1130 SolvCleaner to clean and activate the surface. Start painting first after total evaporation of the cleaner.

Alternative pretreatment, each individual substrate must be tested

- » Apply [Z] ZowoPlast® 1120 Hydro-Cleaner evenly on the surface to be cleaned, e.g. with a pump spray bottle. Cleaning is carried out using a fine sanding sponge (grit 150-180). The mild, wet-abrasive cleaning provides mechanical reinforcement of the cleaning effect. We recommend to replace the sanding sponge after about 40 linear meters of window profile, so as not to spread removed grease and dirt residue on the surface. Dry surface after cleaning with a clean, lint-free cloth or pad, in order to remove impurities, which were solved by the cleaner, safely from the surface.
- » The surface is grinded with a sanding sponge / -pad of grit 150, abrasive paper 280 - 320 grit, scotch brites or the corresponding grinding brushes. Afterwards the surface is cleaned from sanding dust and activated for coating by means of [Z] ZowoPlast® 1120 Hydro-Cleaner or [Z] ZowoPlast® 1130 SolvCleaner. Start painting only after total evaporation of the cleaner.



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General Information for Substrate Pretreatment

- » Protect cleaned substrates against fresh contamination (for example dust, silicone on fingers when handling the substrate).
- » Start coating within 30 minutes after finishing the cleaning process in order to avoid formation of new dust, utilizing the cleaner's antistatic effect and adhesion promotion of the subsequent [Z] ZowoPlast® coating.
- » Because of the large variety of substrates on offer, compatibility with cleaner and adhesion of [Z] ZowoPlast® coating always have to be checked individually.
- » More information about the application and the pretreatment can be read in the technical and safety data sheet of [Z] ZowoPlast® 1120 HydroCleaner and [Z] ZowoPlast® 1130 SolvCleaner.
- » It is possible to coat other substrates of plastic, rather PVCu, with [Z] ZowoPlast® 2450. In this case an adjustment of the pretreatment can be recommended. The adhesion and durability properties, of the composite of substrate and coating, must be tested.

Application Method

Spraying

Spraying process	Nozzle [mm]	Pressure [bar]	Atomiser [bar]
Airless / Airmix	0,21 – 0,28	50 – 80	1,0 – 2,0
Pressure cup gun	1,3 – 2,0	1,5 – 2,5	./.
Gravity gun	1,8 – 2,2	1,5 – 3,0	./.

- » Can be sprayed up to a wet-film thickness of 125µm – 175µm, corresponding to a dry-thickness of 40 – 60 µm. As to critical colors it can be necessary to spray a second time to obtain a good opacity.
- » As to the application of more than 175µm per layer, the drying time will be significant longer and the performance of the coating, e.g. adhesion and hardness, will be affected negatively.

Processing Viscosity

- » Ready to use. If necessary, can be thinned with max. 5% water (preferred with distilled water)

Processing Conditions

- » Mustn't be in contact with solvent, since the dispersion can flocculate.
- » Using only at a temperature of 18 °C – 30 °C (substrate and material) and approx.50% relative air humidity.
- » To avoid skin formation, keep the package always closed.
- » To take particle off, filter the material with a mesh size of 125µm
- » Stir material well before use, avoid air inclusion.

Product Consumption

Approx. 150ml/m² by a wet-film thickness of 150 µm (without overspray)

Drying Time

(20 °C / 50% relative Air Humidity)

Air Drying:

- » Dust-dry (dryness stage 1*) after approx. 70 minutes
- » Touch-dry (dryness stage 4*) after approx. 120 minutes
- » Transport-dry (dryness stage 7*) after drying overnight (approx. 16 h)

Forced drying by 50 °C

- » Dust-dry (dryness stage 1*) after approx. 5 minutes
- » Touch-dry (dryness stage 4*) after approx. 20 minutes
- » Transport-dry (dryness stage 7*) after approx. 70 minutes
- » The duration of drying depends on the film thickness and drying condition. Low temperature and high humidity delay drying. Take care for a sufficient temperature and air exchange.
- » After having achieved dryness stage 7, foliation is possible.
- » After 7 days of drying time (20 °C / 50% relative air humidity) the final adhesion, hardness and chemical resistance will be achieved.

* Dryness stage according DIN 53 150, coating thickness wet: 150 µm, dry: 50 µm



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Recoatability

» Recoatable with itself after a drying time of 70 minutes (20 °C / 50% relative air humidity) is possible.

Cleaning of the Tools

Clean the tools directly after use with water or [Z] ZowoSmart® HydroCleaner.

System Products

Cleaner	[Z] ZowoPlast® 1120 AquaCleaner [Z] ZowoPlast® 1130 SolvCleaner
Top Coat	[Z] ZowoPlast® 2450 TopCoat OneLayer COLOR

Steps of coatings exemplary. The respective technical data sheets of the products must be observed.

Standard Steps of Coating

[Z] ZowoPlast® 1130 SolvCleaner

1 x [Z] ZowoPlast® 2450 TopCoat OneLayer COLOR, approx. 150 µm

Type of Packaging

20 Liters and IBC, further packaging units on request.

Additional Information

Special Information

» Perform a test coating. Check color before use. Subsequent claims cannot be considered. Wood ingredients can cause discoloration!

» Use only one batch no. per layer and color tone!

» Please observe Berger-Zobel steps of coating!

VOC-Labeling

EU-limit for the product (Cat. A/e): 150 g/l (2007) / 130 g/l (2010)

This product contains maximum < 130 g/l VOC

Minimum Shelf Life

12 months cool but free of frost in the closed original packaging

Compatibility

The processor has to test the compatibility of the coating with contact materials like tapes or seals. Cleaning new coated Surfaces earliest after 6 weeks. Use only water borne cleaner, e.g. [Z] ZowoSmart® 5101 Cleaner or a mild neutral cleaner. To avoid irreparable damage, clean without abrasive cleaner, steel wool, abrasive sponges, blades, solvent cleaner.

Safety Instructions

Always read label and product information before use. Please observe the usual precautions during processing and storage. For safety-relevant data and instructions on disposal refer to the Material Safety Data Sheet.

All information provided is state of the art. Because of the large number of options for use and processing, however, obligation and liability must be ruled out. With the appearance of new versions, previous editions lose their validity.