



KAPCI
COATINGS

Technical Data Sheet

Issue date January 2025

for professional use only

Kapci W S wood system W S 100/ W S 200 / W S 250

Product properties

Kapci WS is a color mixing system for wood that provides great variety of possibilities to paint and decorate wood in interior. WS system consists of series of toners including WS 100 2K PU topcoats, WS 200 Basecoats, and WS 250 1K topcoats. The mixing system enables creating of a spectrum of solid colors and special effect basecoats including aluminum, gold, pearl and multi-color effects, which are available in Kapci formula retrieval system.

Products

WS 100 2K PU Paint
WS 200 Special Effect Basecoat
WS 250 1K Paint
WS 120 Matting Agent
WS 150 Interior Hardener
WS 155 Interior Hardener
WS 160 Thinner

WS 100 2K PU Paints deliver a broad range of colors with a variety of shades and gloss levels including high gloss, semi-gloss and satin according to the formula retrieval system. 2K PU topcoats are long lasting with outstanding hardness, elasticity, and chemical resistance. Excellent mechanical and chemical resistance makes the topcoat suitable for any indoor wooden substrate when a high-quality topcoat is desired.

WS 100 2K PU topcoats are used in interior for top coating of room furniture (tables, chairs, wall-units, cupboards), bathroom fittings, public furniture (office, hotels, cafe, kindergarten, school furniture, etc.), and woodworks (doors, partitions, built-in closets, ceilings, etc.).

WS 200 Special Effect Basecoats provide shiny, brilliant and sparkling look of wood. WS 200 can be used as a sole basecoat color or can be mixed with WS 250 1K paint to deliver a customized basecoat color. WS 200 basecoat colors must be overcoated with clearcoat and can be used in both interior and exterior. If overcoated with interior clearcoat, the basecoat color should only be used indoor; if overcoated with exterior clearcoat, can be used in interior and exterior.

WS 250 1K Paints provide a range of solid colors topcoats suitable for application over any wooden substrate in interior and exterior. They can be used as sole paints or can be mixed with WS 200 special effect basecoats.

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Mixing ratio

Product	WS 100 2K PU Topcoat	WS 200 Special Effect Basecoat	WS 250 1K Topcoat
Mixing ratio (by volume)	100:50:30-40	100:100	100:100
Hardener	WS 150	no	no
Thinner	WS 160	Kapci 526	Kapci 526
Notes	a) Add 40% WS160 thinner if applied in hot and/or dump conditions. b) For satin and semi-gloss topcoats, mixing ratio is 100:50:10-20 (see "Matting of WS 100").	a) WS 200 color requires application of clearcoat over it. b) If WS 200 is mixed with WS 250, recommended ratio by weight is: 100 (WS 200) with maximum 100 (WS 250). Then apply desired clearcoat.	Sole WS 250 paints don't require clearcoat. If WS 250 is mixed with WS 200, recommended ratio by weight is: 100 (WS 200) with maximum 100 (WS 250). Then apply desired clearcoat.

Substrate and surface preparation

Apply WS 100 2K PU topcoats and WS 200 basecoat colors over wooden substrates previously properly sanded and painted with Kapci 2130 PU White/Black Sealer, Kapci 2202 PE White Sealer or Kapci 2320 2K PU double function paint.

If colored 2K PU sealer is needed, tint Kapci 2130 Sealer White with WS 100 up to maximum 20% by weight or choose desired color of Kapci 2320 Double Function Paint.

Apply WS 250 1K Paint over pigmented NC sealer.

Prior to applying WS 100, WS 200 or WS 250, sand the surface with sanding paper grit P400 or P500. For WS 200, use sanding paper grit P500.

Matting of WS 100

WS 120 Matting Agent can be mixed up to 100% by weight with WS 100 2K PU topcoat (see table below). After mixing, add hardener and thinner in the mixing ratio 100:50:10-20 by volume. Note that less thin might be needed due to addition of WS 120 matting agent. It is always recommended to check the viscosity of the paint before adding the thinner.

The recommendations below are for guidance only

Gloss	WS 100, gram	WS 120, gram	Total, gram
High Gloss	100	0	100
Semi-Gloss	60	40	100
Satin	50	50	100

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Application

Application Properties	WS 100	WS 200	WS 250
Number of coats	2 single coats	2-3 mist coats (depending on shade)	2 single coats
Flash off time	20-30 min	Until matt	Not required
Spray gun nozzle	1.3-1.4 mm		
Pressure	2 bar/30 psi inlet (HVLV spray gun) 3-3.5 bar/ 40-45 psi inlet (Conventional spray gun).		

Note: Refer to the spray gun manufacture's recommendation.

Drying times at 25°C

Drying time	WS 100	WS 200	WS 250
Dry dust free	10-15 min	n/a	n/a
Dry to handle	Approx. 8 hours	n/a	30 min
Before applying clearcoat	n/a	Approx. 20 min	n/a

Note: Drying times for WS 100 are given for high gloss topcoats; semi-gloss and satin topcoats dry faster.

Theoretical coverage

Theoretical coverage for all products: 6-8 m²/l per coat

General notes

1. Generally, humid conditions slow down drying time and curing of 2K PU Products.
2. Add 40% WS 160 PU Thinner in hot and humid conditions.
3. Allow 24 hours drying of undercoats (see relevant TDSs for KAPCI 2130, KAPCI 2320 or KAPCI 2202) before applying WS 100 high gloss topcoats or WS 200 basecoats. Semi-gloss and satin 2K PU topcoats can be applied after minimum 4 hours (at 25°C).
4. WS 200 basecoats and a mixture of WS 200 and WS 250 require overcoating with clearcoat.
5. When matting, it is recommended to check viscosity of the paint mixture before adding the thinner, since less thin might be needed due to addition of WS 120 matting agent.
6. Practical coverage depends on several factors including shape, roughness and porosity of the object to be painted, spraying equipment used, application methods, application conditions, film thickness, and so on.

Health and Safety

1. For full Health and Safety information, please refer to the Material Safety Data Sheet.
2. Observe the precautionary notices displayed on the container.
3. Good ventilation must be provided in the working environment.

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