

IDROIN



POLISTUC[®]
C O A T I N G S

INTRO

When you coat a wooden substrate, to be used in indoor environments, it is necessary that its beauty never changes.

Polistuc water based coatings for interior are studied and continuously developed to give this characteristics to the furniture, with an high quality and chemical-physical resistances, comparable to the most common solvent based coatings for interior. The current and growing consciousness towards the environment, but also to the air quality in domestic environment and the safeguard of the worker, brings Polistuc to give a particular attention to the research of resins and innovative additives to make its coatings more eco-friendly, keeping a very high quality standard. Polistuc plays a pioneering role in the ecology and health, adapting itself to the environmental and safety

restrictive rules at the workplace.

Water based coatings are not flammable and can be diluted with water.

Polistuc coatings range includes products both for industrial and craft applications.

Water based coatings of IDROIN series protects furnishing elements during the time, thanks to their formulation with anti-yellowing acrylic resins and new generation additives.

Polistuc products are used in coatings systems respecting EN 71.3 standard, concerning the use of toys and every type of materials which can be in contact, occasionally also, with children.

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Index

p.	5	01. Stains
p.	7	02. Insulating agents
p.	8	03. Clear and pigmented sealers
p.	11	04. Antique effect patinas
p.	13	05. Clear matt and glossy topcoats
p.	14	06. Clear matt self sealers
p.	16	07. Pigmented matt and glossy topcoats
p.	17	08. Specific products for flooring
p.	18	09. Hardeners
p.	19	10. Glass topcoats
p.	21	11. Tintometrical system
p.	21	12. Converters



STAINS

Wood is a natural element still used in furniture sector. It can be used with its natural colour or especially painted following the market trends.

To satisfy every type of request coming from the market about colouring and final effect, the stains can be easily diluted with a specific solvent or they can be formulated with suitable binders or additives to point out the wood structure.

Polistuc presents in this section two different indoor water based stains series, they can be used to achieve every type of desired results, mixing bases of the same series or different series, to achieve different effects.

CW100 and CW9000 series are water based clear series of stains, using them the wood will be enhanced in its beauty, colouring it without changing its aspect.

01. STAINS

CW100 series

CLEAR WATER BASED STAINS

Preparation: dilution 1:10 with water.

CW100 series is characterized by high transparency and a good light resistance. It's suggested every time the wooden substrate has to be tinted keeping perfectly visible the distinguishing features of each essence. It can be diluted with water. If grain marking is needed, it's possible to water based binders to the concentrated stain.

Employment sector

- Staining of wood essences

Application system

- Spray
- Wiping
- Brush

CW9000 series

CLEAR WATER BASED STAINS

Preparation: dilution 1:30 with water.

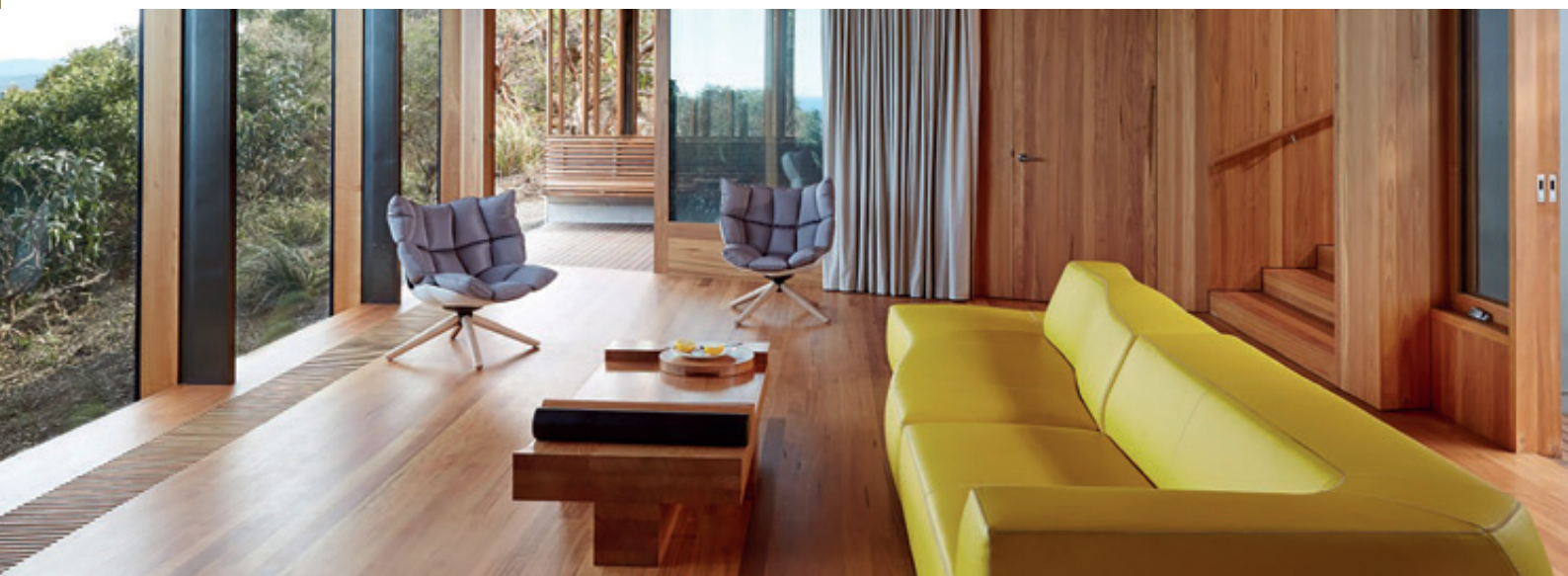
CW9000 series is characterized by high transparency. It's suggested every time the wooden substrate has to be tinted keeping perfectly visible the distinguishing features of each essence. It can be diluted with water.

Employment sector

- Staining of wood essences

Application system

- Spray
- Wiping
- Brush
- Dipping



INSULATING AGENTS

The use of valuable woods like oak, chestnut or iroko, increases risks, during coating and drying processes, to have spots, colour variations, or non homogeneous coated surfaces.

To avoid this type of problems Polistuc formulates two different insulators, a clear one and a pigmented one. They are able to make

a barrier between the support and the coating system, to avoid the uprising of these problems.

The application requests few grams of product per square meter but the advantage in terms of durability is increased.

SEALERS

The typical system for interior on a wooden substrate foresees at least two coats, but before it is better to apply the desired stain. The final results depend on the correct choice of coating system and the related products used.

Normally it is the topcoat that is evaluated, actually the nature and the quality of the sealer play a fundamental role on the final results, because they influences the aesthetic quality, the lasting and the mechanical characteristics of the coating system. Polistuc sealers are characterized by ease of application, good verticality, transparency and sandability. According to the applied system and

the process parameters, Polistuc can provide suitable technological solutions and, due to the possibility of producing internally its resins used in water based coatings, provides customized solutions to the final users.

The final aim of the Polistuc Research and Development Lab is always the same: providing high quality coatings to keep unchanged the natural beauty of the wooden structure.

Polistuc sealers are available both in clear and pigmented versions, monocomponent or bicomponent.

02. INSULATING AGENTS

WIS311

CLEAR WATER BASED BICOMPONENT INSULATING AGENT

Preparation: 20% WCA105 + 5-10% water

WIS311 is a clear water based bicomponent insulating agent formulated to paint woods rich in tannin and/or extractives (oak, Iroko, chestnut, etc)..

Employment sector

- Furniture
- Doors
- Flat surfaces

Application system

- Spray (airmix/airless) or traditional spray gun

WIS313

WHITE WATER BASED BICOMPONENT INSULATING AGENT FOR OPEN PORE

Preparation: 10% WCA102 + 5-10% water

WIS313 is a white water based bicomponent insulating agent formulated to paint woods rich in tannin and/or extractives (oak, Iroko, chestnut, etc). The main characteristic are the great penetration and excellent appearance on wood's grain. It is suggested also for MDF.

Employment sector

- Furniture
- Doors
- Flat surfaces

Application system

- High pressure spray (airmix) or traditional spray gun



03. CLEAR AND PIGMENTED SEALERS

WFSZ60926

MONO/BICOMPONENT WATER BASED SEALER

Preparation: 5-10% WCA102 (optional)
+ 5-10% water

WFSZ60926 is a general sealer characterized by an optimal appearance on wood's grain and filling, good sandability and it can be overcoated with solvent based topcoats.

Employment sector

- Furniture
- Doors
- Flat surfaces

Application system

- Spray

WFS5513

WHITE WATER BASED SEALER

Preparation: 5% WCA102 (optional) + 5-10% water

WFS5513 is a white sealer characterized by good sanding, optimal appearance on wood's grain, good chromatic coverage and filling properties. Suggested also for MDF.

Employment sector

- Furniture
- Flat surfaces
- MDF panels

Application system

- Spray

WFS0026

MONOCOMPONENT WATER BASED TIXOTROPIC SEALER

Preparation: 5-10% water

WFS0026 is a monocomponent sealer characterized by optimal verticality, good transparency, optimal appearance on wood's grain, easy to sand. Its rheology allows to paint in vertical way, reaching good thicknesses without sagging issues.

Employment sector

- Furniture
- Turned objects
- Chairs

Application system

- Spray (also electrostatic)
manual or automatic system

WFS5501

WHITE PIGMENTED WATER BASED SEALER

Preparation: 5% WCA102 + 0-20% water

WFS5501 is a white pigmented water based bicomponent sealer for interior and especially recommended for MDF and wooden substrates. It is characterized by extraordinary wetting and drying properties.

Employment sector

- MDF substrates
- Wooden substrates

Application system

- Spray







ANTIQUE EFFECT PATINAS

Antique effect patinas are monocomponent products which gives a rustic and country effect.

These products simulate the natural aging of coated furniture, that over time is damaged and consumed, exposing the substrates layers which form the coating system.

Polistuc patinas are applied by spray and they can be easily removed

through the use of Scotchbrite or sanding paper. After that, they must be protected by a matt or glossy topcoat, depending on the desired effect.

They can be used both for clear and pigmented systems.

Polistuc has formulated its patinas in order to satisfy every kind of shade required, from medium or dark colours, up to pastel tones.

04. ANTIQUE EFFECT PATINAS

WANT000

BASE FOR WATER BASED ANTIQUE EFFECT PATINA

Preparation: dilution with water from 50 to 100%

This is a clear base for antique effect patinas for decapè and country systems. The effect that can be achieved depends on the wood essence and to the application method. The WANT000 series patinas are applied by spray on open grain sealer (pigmented or clear depending from the desired effect) and after drying (the times may vary depending on the quantity applied) the excess is removed by scotch-brite.

Employment sector

- Furniture
- Doors
- Flat surfaces

Application system

- Spray

WANT001

WHITE WATER BASED ANTIQUE EFFECT PATINA

Preparation: dilution with water from 20 to 50%

This is a white antique effect patina for decapè system and country furniture. The final effect is strictly related to the essence typology and the application method. It is applied by spray on open grain sealer (pigmented or clear depending on the desired effect) and after drying (the times may vary depending on the quantity applied) the excess is removed by scotch-brite.

Employment sector

- Furniture
- Doors
- Flat surfaces

Application system

- Spray





CLEAR AND PIGMENTED TOPCOATS

The last step in a coating system is the application of a topcoat, which underlines the natural beauty of the wood.

This products series has the purpose to increasing the resistance to the natural ageing of the coated furniture, giving to the wooden substrate an important and efficient protection.

Polistuc topcoats are formulated with special additives, UV absorbers and radical captors which allow to achieve an high durability and an excellent aesthetic quality, thanks to optimal mechanical

characteristics of elasticity, abrasion resistances and non yellowing properties.

It is available both in clear and in pigmented versions, it can be mono or bi-component.

The constant research of forefront raw materials and additives, the attention to the market-trends and the constant collaboration with Research Institutes and the most important Italian Furniture manufacturers, allow Polistuc to be one of the leader companies in the Furniture Industry, producing very high quality systems.

HARDENERS

The hardener is a material which is used in bi-component products. It has the aim of increasing the topcoat resistances to abrasion, superficial hardness and the mechanical resistances in general, as the resistance to hot and cold liquids and to the most common

matters used in the domestic environment.

They are perfectly compatible and easy to mix, it does not change the uniformity of the final layer, in terms of gloss level and mechanical characteristics.

05. CLEAR MATT AND GLOSSY TOPCOATS

WOS0022G series

WATER BASED MONO/BICOMPONENT TOPCOATS SERIES

Preparation: 10% WCA102 (suggested) + 5-10% water

WOS0022G is a matt topcoat for general use, characterized by an optimal transparency, good pore marking and soft feel, easy to apply, scratch resistant. If catalysed, the chemical and physical resistances and the surface hardness are increased.

Employment sector

- Doors
- Flat surfaces

Application system

- Spray

WLT001

BICOMPONENT WATER BASED HIGH GLOSS TOPCOAT

Preparation: 40% WCA103 + 50% water

Alternative: 50% WCA105 + 40-50% water

WLT001 is a glossy bicomponent clear topcoat characterized by optimal brilliance, body and chemical resistances. Extraordinary surface hardness, it is superior than the traditional solvent based glossy topcoats. To achieve an optimal aesthetic effect it is recommended to apply it in two coats and then (after 48 hours) brushing.

Employment sector

- Doors
- Flat surfaces

Application system

- Spray



06. CLEAR MATT SELF SEALERS

WOS1G series

AQUA1 WATER BASED CLEAR SELF SEALERS SERIES

Preparation: 2% CW3 (suggested) + 0-15% water

WOS1G is a series of self sealers for interior applications, characterized by high scratch resistance, good transparency, good chemical resistances and fast drying. It is easy to use with good appearance on wood's grain.

Employment sector

- Furniture
- Kid's furniture
- Kid's bedroom furniture applications
- Door and wooden items in general

Application system

- Spray

WOS0021G series

WATER BASED CLEAR SELF SEALERS SERIES

Preparation: 0-20% water

WOS0021G is a series of self sealers characterized by a very good surface hardness, chemical resistances and drying rapidity. Optimal transparency and wetting during the application. Optimal pore definition and ease of application.

Employment sector

- Furniture
- Accessories

Application system

- Spray

WOS2G series

WATER BASED CLEAR SELF SEALERS SERIES

Preparation: 2% CW3 (suggested) + 0-15% water

WOS2G is a series of self sealers for interior applications, characterized by high scratch resistance, optimal transparency, optimal chemical resistances and fast drying. Optimal pore definition and easiness of application.

Employment sector

- Furniture
- Kid's furniture
- Kid's bedroom furniture applications
- Door and wooden items in general

Application system

- Spray



IDROLEGNO

BICOMPONENT NATURAL EFFECT SELF SEALER

Preparation: 5-10% WCA102 (or WCA104) + 5-10% water

IDROLEGNO is a self sealer that provides to the substrate a no-painted effect thanks to the optimal pore definition and the low solid content. It must be applied in two coats. Perfect uniformity and soft feel. IDROLEGNO does not change the natural wood colour.

Employment sector

- Furniture
- Accessories

Application system

- Spray
- Curtain coater

WOS030 series

WATER BASED BICOMPONENT NATURAL EFFECT SELF SEALER

Preparation: 10% WCA102 + 0-10% water

This is a water based bicomponent self sealer for flooring and furniture which gives a natural effect to the coated surfaces. It is characterized by an optimal scratch resistance, optimal sandability and appearance on wood's grain.

Employment sector

- Flooring
- Furniture
- Accessories

Application system

- Spray



07. PIGMENTED MATT AND GLOSSY TOPCOATS

WIOP610G series

MONOCOMPONENT WHITE WATER BASED TOPCOATS SERIES

Preparation: 5-10% water

WIOP610G series is a white topcoats series characterized by good surface hardness and optimal chromatic coverage. Despite to the high viscosity, the product shows a good levelling.

Employment sector

- Furniture
- Doors
- Flat surfaces

Application system

- Spray

WIOP610TIXG series

MONO/BICOMPONENT WHITE WATER BASED TOPCOAT SERIES

Preparation: 5% WCA102 (suggested) + 5-10% water

WIOP610TIXG is a white topcoats series characterized by good surface hardness, optimal chromatic coverage and anti yellowing resistance. The product is perfect to be vertically applied but it reaches an optimal levelling also on flat surfaces. Optimal chemical resistances. If catalysed at 5% with WCA102 surface hardness and the chemical resistances are further increased.

Employment sector

- Furniture
- Doors
- Flat surfaces

Application system

- Spray

WPOP010G series

BICOMPONENT WHITE WATER BASED TOPCOATS SERIES

Preparation: 10% WCA102 + 5-10% water

WPOP010G is a topcoats series characterized by optimal surface hardness and chromatic coverage. The product is perfect to be vertically applied but it reaches an optimal levelling also on flat surfaces. Optimal chemical resistances. If catalysed at 5% with WCA102 surface hardness and chemical resistance are further increased.

Employment sector

- Furniture
- Doors
- Flat surfaces

Application system

- Spray

WLP010 series

BICOMPONENT WHITE HIGH GLOSS WATER BASED TOPCOAT

Preparation: 30% WCA103 + 40% water

Alternative: 40% WCA105 + 40-50% water

WLP010 is a bicomponent glossy white topcoat characterized by an optimal brilliance, fullness, anti yellowing resistance. Exceptional chemical resistances and surface hardness. IDROGLOS must be applied in two coats, no intermediate sanding, and buffed after 48 hours.

Employment sector

- Doors
- Flat surfaces

Application system

- Spray



08. SPECIFIC PRODUCTS FOR FLOORING

WOS1PG series

WATER BASED ONEFLOOR SELF SEALERS SERIES

Preparation: 10% WCA102

This is a water based self sealers series which has been formulated specifically for flooring applications. It is characterized by good drying properties and good wetting of the substrate, this is a really versatile product.

In order to improve the mechanical resistances, catalysis is suggested.

Employment sector

- Flooring

Application system

- Roller
- Brush
- Spray

WOT200G series

WATER BASED SELF SEALERS SERIES

Preparation: 10% WCA104 + 0-10% water

WOT200G is a self sealers series for flooring, laid on site, characterized by an optimal surface hardness, levelling, spreading and optimal scratch resistance. In order to improve chemical-physical performances, it is suggested the use of hardeners.

Employment sector

- Flooring

Application system

- Roller
- Brush
- Spray



09. HARDENERS

WCA102

HARDENER FOR WATER BASED PRODUCTS
Percentage of use: 5-10% max

WCA102 is a water soluble hardener for water based products. It must be put in a part, slowly and under stirring. The pot life with WCA102 is about 2 hours. Products added with WCA102 (where is suggested in the TDS) have an optimal surface hardness, optimal chemical resistances and trasparency.

WCA103

HARDENER FOR WATER BASED PRODUCTS
Percentage of use: 30-40% max

WCA103 is a water soluble hardener specifically developed for IDROGLOS series. WCA103 must be added by dropping and under stirring. It gives to the final coats brilliance, scratch and chemical resistances. The pot life is about 2 hours.

WCA104

HARDENER FOR WATER BASED PRODUCTS
Percentage of use: 5-10% max

WCA104 is a water soluble hardener, specifically developed for the curing of WOT200G series, which gives to the product optimal levelling, trasparency, scratch and chemical resistances similar to normal solvent products used in flooring sector.

WCA105

HARDENER FOR WATER BASED PRODUCTS
Percentage of use: 40-50% max

WCA105 is a water soluble hardener specifically developed for IDROGLOS series. WCA105 must be added by dropping and under stirring. It gives to the final coats brilliance, soaking, scratch and chemical resistances. The pot life is about 2 hours. Compared with WCA103, WCA105 gives more versatility and it is easier to use.





GLASS TOPCOATS

Polistuc includes in its products range a special topcoats series specific for glass, which is used as complement furniture or as part of kitchens, living rooms, bathrooms and bedrooms.

The coating system involves the application of a single product monocomponent, after the addition of an adhesion promoter, which

is necessary to provide an optimal adhesion to the glass.

It is possible to provide to the glass many different colours, which are included in the most common colour charts used in the wood sector, mixing conveniently a colourless textured binder with a white textured base and a complete system of sixteen pigmented pastes.

10. GLASS TOPCOATS

WOG002 series

TEXTURED TOPCOATS SERIES FOR GLASS

**Preparation: 4% CR4110 + 2% CW3 (suggested)
+ 10% water**

WOG002 identifies a series of products studied, specifically for the glass painting. This series is characterized by easiness of use and uniformity, and an optimal adhesion on glass (valuable after 72 hours of application).

Employment sector

- Tempered or not tempered glass

Application system

- Spray



COLOUR PASSION SYSTEM

Colour Passion is a tintometrical system created by the necessity to give a professional and suitable service for water-based and solvent-based pigmented products all over the world.

The most important and well-known Italian furniture manufacturers everyday cooperate with Polistuc Laboratories in order to developing their products and new solutions which are then followed in the Global Market, concerning aesthetic and physical-mechanical performances.

In order to allow to every Polistuc's customer, everywhere in the world, the possibility to customize their pigmented products, Polistuc created an automatic tintometric system which includes a spectrophotometer for the formulation, correction and checking of the colour curves, an automatic tintometer for the pigmented paste dosing in the specific converter, a gyroscopic or wall mixer for the perfect products mixing and several equipments which allows to work quickly, with efficiency and cleanliness in order to provide an high quality service to the final customer.

11. TINTOMETRICAL SYSTEM

Polistuc Colour Passion tintometrical system is conceived and structured to allow to final users or stores to reproduce a wide range of high quality pigmented topcoats. Thanks to each component of the system, it is possible to reproduce accurately, quickly, easily and consistently colours included in commonly used colourcharts, like RAL, NCS, Pantone, Sikkens, etc.

In this way it is possible to ensure high quality performances to the coatings, just if they came directly from production department of

Polistuc, one of the leading companies in wood coatings market.

All Polistuc coatings and pigmented pastes are formulated and produced in our facilities, in Italy, this means that final quality and constancy of characteristics are checked daily, in order to provide to the final user high quality coatings or customised ones. This system is successfully applicable to monocomponent pigmented products for exterior.

colour passion hq

HIGH QUALITY WOOD LINE

16 PIGMENTED PASTES

WPP10 - White paste	WPP30 - Orange paste	WPP50C - Black paste
WPP22 - Oxide yellow paste	WPP31 - Oxide red paste	WPP60 - Green paste
WPP23 - Cold lemon yellow paste	WPP32 - Bright red paste	WPP70 - Bordeaux paste
WPP24 - Warm lemon yellow paste	WPP40 - Phtalo blue paste	WPP71 - Magenta red paste
WPP25 - Warm sun yellow paste	WPP50 - Deep black paste	WPP80 - Violet paste
WPP26 - Cold sun yellow paste		

3 WHITE BASES

WIOP610G - Monocomponent white matt water based topcoat
WPOP010G - Bicomponent white matt water based topcoat
WLP010 - Bicomponent glossy water based topcoat

4 CLEAR BASES

WOG002 - Textured topcoat for glass
WIOP001 - Matt clear converter for monocomponent pigmented products
WPOP001G - Matt clear converter for bicomponent pigmented products

12. CONVERTERS

WIOP001

MONOCOMPONENT MATT CLEAR CONVERTER

Preparation: 0-10% water

WIOP001 is a monocomponent converter, it can be used together with pigmented pastes of "PNW" series (5-20% according to the desired final colour) to achieve topcoats with good resistances against yellowing, good spreading, soft feel and scratch resistance.

Employment sector

- Furniture
- Flat surfaces

Application system

- Spray

WPOP001G

BICOMPONENT MATT CLEAR CONVERTER

Preparation: 10% WCA102 + 10% water

WPOP001G is a bicomponent converter, it can be used together with pigmented pastes of "PNW" series (5-20% according to the desired final colour) to achieve topcoats with very good resistances against yellowing, good spreading, soft feel and scratch resistance.

Employment sector

- Furniture
- Flat surfaces

Application system

- Spray

Notes

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