

The logo consists of the word "ILVA" in a bold, black, sans-serif font, centered within a black rectangular border.

**ILVA**

**KLIMA HIGH PERFORMANCE  
WATER-BASED PRODUCTS  
FOR EXTERIOR**

**IC&S  
P.O. BOX 10845  
LANCASTER, PA 17605  
800-220-4035**

**ILVA  
IVM CHEMICALS, srl  
INTERNATIONAL WOOD COATINGS DIV.  
PARONA, ITALY**

## ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** HNS5AA1

**DESCRIPTION:** CLEAR WATERBASE WOOD DECK PROTECTOR

**USES:** Clear WB deck protector for roller/brush application with good wetting properties and superior resistance to chlorine, hand cream and lotions. However, some sun screen products do attack the film. For exterior use you must tint to a transparent or translucent color with PZ4 or PZ5 series colors at 0.5-3%.

On oily, greasy, high tanin woods, such as cedar, oak, teak, and ash; it is recommended to use our TDS500 Solvent Base Isolator to prevent resin or tanin bleed. Soft woods normally do not require the solvent base isolator.

**APPLICATION SYSTEM:** Brush or roller

**PRODUCT PREPARATION:** HNS5AA1 WB Deck Protector 100 parts by weight or volume  
Water Thinner 5 parts by weight or volume

Substrate preparation: Raw wood - recommended moisture content is 6-10%. Surface prep by removing all traces of grease, waxes and resins. Perform sanding with 150 grit paper for softwoods and 180 grit sandpaper for hardwoods.

**FILM THICKNESS:** 3-5 mils wet per coat

**COATS:** Two are recommended

**GENERAL PROPERTIES:** Specific Gravity, gr/cc 1.020 +/- 0.030  
Viscosity\* 30 sec +/-53  
Solids, % by weight 15 +/- 2  
\*ISO 3 cup at 20°C/68°F

**DRYING TIME:** Dust free: 30-35 minutes  
(at 20°C/68°F) Handling: 4 hours  
**RH% between 45-65** Stackable: 6 hours  
Full drying 24 hours

**NOTES:** Mix the product before use. For best results, the optimum conditions of application are:

\* Ambient temperature between 18 and 22°C (64-72°F)

\* Ambient relative humidity between 65 and 70%

\* Support humidity between 8 and 14%

Note that coatings applied at lower temperatures will show chemical and mechanical properties lower than standard performances that can normally be achieved.

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F)

**DATE OF ISSUANCE:** 6-20

IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** HNS703

**DESCRIPTION:** Klima Clear Gel Impregnator

**USES:** To be tinted with PZ4xx at 3-5% or PZ5xx at 1-3%. Apply to achieve a consistent uniform color of the wood, especially recommended when harmonizing of the wood is necessary, such as finger joint wood. May be used on hard or soft woods. Good vertical hang.

**APPLICATION SYSTEM:** Brush, Spray, or Lambs wool pad, then wipe

**FILM THICKNESS:** 1.6-2.3 mils wet

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.010+/-0.03
	Viscosity as supplied Brookfield	5000+/-1000 cps, spindle 2, speed 10
	Solids, % by weight:	8+/-2
	Thinner:	Water
	% of dilution:	0-5%

**DRYING TIME:** At 20°C with ventilation, dry to handle:  
(at 20°C/68°F) Dust Free: 20 minutes  
Dry to touch: 1 hour  
Full dried: 4 hours

(Drying times may vary according to temperature, ventilation and relative humidity)

**WARNINGS:** KEEP FROM FREEZING

**SHELF LIFE:** 12 months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUE:** 2-18, 4-19

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** HNS710

**DESCRIPTION:** Klima Clear Uniforming Impregnator

**USES:** To be tinted with PZ4xx at 5-10% or PZ5xx at 2-5%. Apply to achieve a consistent uniform color of the wood, especially recommended when harmonizing of the wood is necessary, such as finger joint wood. May be used on hard or soft woods.

**APPLICATION SYSTEM:** Brush, Flow coating, Dipping

**FILM THICKNESS:** 1.6-2.3 mils wet

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.030+/-0.02
	Viscosity as supplied (EN ISO 2431) ISO 3 cup	26 +/-2
	Solids, % by weight:	10.5 +/-2
	Thinner:	Water
	% of dilution:	0-5%

**DRYING TIME:** At 20°C with ventilation, dry to handle:  
**(at 20°C/68°F)** Dust Free: 20 minutes  
Dry to touch: 1 hour  
Full dried: 4 hours

(Drying times may vary according to temperature, ventilation and relative humidity)

**WARNINGS:** KEEP FROM FREEZING

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUE:** 2-18

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

<b>PRODUCT SERIES:</b>	<b>KLIMA NANOTECH SERIES</b>		
<b>PRODUCT CODE:</b>	<b>HTM5A273, HTM5B052, HTM5B036</b>		
<b>DESCRIPTION:</b>	<b>KLIMA Superclear Ultra-Non-Yellowing Nanotechnology External Coating</b> Water based clear topcoat, excellent clarity, filling power, weathering resistance.		
<b>PRODUCT PREPARATION:</b>	HTM5 Nanotech Series Water	KLIMA WB NANO-TECH CLEAR Thinner	100 parts by weight or volume 5-6 % by weight or volume
<b>USES:</b>	Two coats. To be used as a self-sealer or final coat over tinted impregnator or colors. Not to be used as a clear finish over natural wood. For outdoor use.		
<b>APPLICATION SYSTEM:</b>	Airless spray, Airmix spray, Electrostatic spray, robot spray, airless vertical spray, gravity gun, brush		
<b>FILM THICKNESS:</b>	7 mils wet per coat, for a total of 14		
<b>COATS:</b>	2 coats to achieve wet film thickness of 14 mils		
<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc		1.010+/- .03
	Viscosity as supplied (Brookfield Aspo n <sup>o</sup> 4 vel 2.5)		35,000 +/- 5000 cps
	Solids, % by weight:		38 +/-2
	Thinner:	Water	
	% of dilution:		5-6% depending upon equipment
<b>DRYING TIME: (at 20°C/68°F)</b>	Air Dry with ventilation, dry to handle:		
	Room temperature drying @18-22°C, 64-72°F		4 hours
	Stackable after room temperature drying		24 hours with spacers
	Hot air stages tunnel drying (20-40-60°C) (68-104-140°F)		
	complete drying		2 hours
	Stackable after jet hot air drying		8 hours with spacers
	(Drying times can vary according to temperature, ventilation and relative humidity)		
<b>TYPICAL SYSTEMS:</b>	Substrate	Various Woods	
	Use an impregnator base tinted with PZ4 or PZ5 colors		
	Drying		
	Topcoat	HTM5 Nanotech Series	2 coats
<b>AVAILABLE SHEENS:</b>	HTM5B052	50 Sheen	
	HTM5A273	30 Sheen	
	HTM5B036	10 Sheen	
<b>WARNINGS:</b>	<p>In a coating process with professional products:</p> <ul style="list-style-type: none"> <li>-besides the product quality , the final results also depend on numerous other variables, such as environmental conditions; homogeneity in the quality of substrate; the constancy of the application cycle; the plants performance; the proper use of the products, etc.</li> <li>-in the process of industrial coating a certain waste product is to be considered normal and therefore not attributable to product quality</li> <li>-the final color is influenced by the preparation of hte substrate and the conditions of application; for this reason it is essential fo check in advance the result in terms of final use.</li> </ul>		

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**  
**(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA NANOTECH SERIES

**PRODUCT CODE:** HTM5A273, HTM5B052, HTM5B036, page 2

**DESCRIPTION:** KLIMA Superclear Ultra-Non-Yellowing Nanotechnology External Coating

**WARNINGS:** Our company cannot ensure the control of the coating process carried out by the user. We cannot, therefore, take on any responsibility for the final result achieved through the use of our products. On the other hand, we guarantee the consistency of the chemical and physical characteristics of the product indicated in the relevant TDS, pledging to replace if it does not correspond to the declared features.

**PRODUCT PROPERTIES:** Data on the chemical and physical characteristics of the product are recorded at 20°C, 68°F and 70% relative humidity

For test results, the optimum conditions of application are:

Ambient temperature between 18 and 22°C, 64-72°F

Ambient relative humidity between 65 and 70%

Substrate humidity between 8 and 14%

The conditions to be observed scrupulously are:

-Water-based products are particularly sensitive to storage conditions: temperatures below 5°C, 41°F and above 35°C, 95°F, may affect the product characteristics, making it unusable. For this reason, a water-based product should be stored indoors at temperatures not below 5°C, 41°F and not above 35°C, 95°F, in a properly ventilated area, not exposed to solar radiation.

-Always shake the products before use

-The application must not take place at a temperature lower than 15°C, 59°F or above 35°C, 95°F

-The drying should not take place at a temperature below 15°C, 59°F

-The ambient relative humidity during drying should be between 50% and 70%

-To decant paints, exclusively use containers made of suitable material, such as polyethylene and stainless steel.

-After use, we recommend that you always close the can carefully

-The end result of the coating cycle is the sole responsibility of the user, who must make sure that the product matches their needs and that environmental conditions, application, or media specifications, do not require substantial changes of use.

It is the user's responsibility to:

-Adhere to the conditions indicated above

-Comply with the rules of hygiene and safety during product application, according to the descriptions given in the safety data sheets.

-Keep from freezing

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUE:** 06-15, 10-17, 2-18, 4-19

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** HTM5077

**DESCRIPTION:** KLIMA WB Clear 5 Sheen Topcoat  
Thixotropic topcoat based on acrylic based resins in water dispersion for wood protection. Recommended to add PZ4xx colorants at 0.1-0.5% to enhance performance, or add up to 10% PZ5xx colorants to make deep tone colors. Not intended to be used as a clear finish as it will amber, and without pigment, performance will suffer.

**USES:** For outdoor use, pre-coated with Klima Aquatech series impregnating stains and sealers. May be used over TN40 Sealer or as a self-sealer.

**PRODUCT PREPARATION:**

HTM5077	WB Clear Topcoat	100 parts by weight or volume
Water	Thinner	5 parts by weight or volume

**APPLICATION SYSTEM:** For best results use Kremlin 30:1 pump with Airmix 600 fluid lbs, 35-40 static atomizing air 06134/06154 tips or use conventional, pressure pot, cup gun or apply by roller or brush. To brush use PX0/03 at 2-3%.

**FILM THICKNESS:** 7 mils wet per coat, for a total of 14 mils wet.

**COATS:** 2 coats to achieve minimum wet film thickness of 14 mils

**GENERAL PROPERTIES:**

Specific Gravity, gr/cc	1.029+/-0.02
Viscosity as supplied (Ford 6 Cup)	58 +/-5 secs
Solids, % by weight:	40 +/-2
Thinner:	Water or PX0/03
% of dilution:	Water at 5-20% depending upon equipment PX0/03 at 2-3%

**DRYING TIME:** (at 20°C/68°F)

Air Dry with ventilation, dry to handle:	
Dust Free:	20 minutes
Dry to touch:	1 hour
Full dried:	2-4 hours
Sanding:	2-4 hours

(Drying times can vary according to temperature, ventilation and relative humidity)

**COATING CYCLES:**

**Cycle 1 - High Quality with Thixotropic Topcoat**

Substrate	Pine or soft woods
Impregnating:	PN 3/color - 1 coat - 1-2 hours drying
Sealer:	TN40 - 1 coat - 2-4 hours before sanding
Topcoat:	HTM5077 - 1 coat

Before using coated items, it is advisable to wait 3 days. Minimum room temperature during application and drying should be 60°F

CONTINUED ON NEXT PAGE...

IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** HTM5077

**COATING CYCLES:** Cycle 2 - General use as self-sealer

Substrate Pine or soft woods  
Impregnating: PN 3/color - 1 coat - 1-2 hours drying  
Light Sanding with scotchbrite  
Topcoat: HTM5077 - 1 coat - dry 2-4 hours - sand with 280 grit  
Topcoat: HTM5077 - 1 coat

**PRODUCT  
PROPERTIES:**

This product improves the protective action of the impregnating products and protects the substrate from photochemical degradation thanks to the presence of special UV absorbers. Soft to the touch and highly flexible, no sanding when applying coat for maintenance so as to allow easy maintenance.

**MAINTENANCE:** Items already coated with HTM5077 topcoat should have dirt and other residuals removed and be topcoated with the Klima TN030 products.

**WARNINGS:** Keep from Freezing!

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18-25 °C/64-75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 03-18, 4-19

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.



## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA

**PRODUCT CODE:** HTMB06x Series

**DESCRIPTION:** KLIMA UNICO Clear Self Sealer

<b>PRODUCT PREPARATION:</b>	HTMB06x Water	KLIMA Unico Clear Self Sealer Thinner	100 parts by weight or volume 0-5 % by weight or volume
-----------------------------	------------------	--	--

**USES:** Three coats. To be used as a self-sealer or final coat over tinted impregnator or colors. Not to be used as a clear finish over natural wood. For outdoor use. Excellent for finishing and protecting your exterior doors, railing, columns, decks, or exterior furniture. Easy application, excellent performance and environmentally safe.

**APPLICATION SYSTEM:** Spray, gravity gun, brush

**FILM THICKNESS:** 2.4-3.2 mils wet by brush, 3.2-4 mils wet by spray

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.020+/- .03
	Viscosity as supplied (Ford 6 cup)	20 +/- 2
	Solids, % by weight:	25 +/-2
	Thinner:	Water
	% of dilution:	5-6% depending upon equipment

<b>DRYING TIME:</b> (at 20°C/68°F)	Air Dry with ventilation, dry to handle:	
	Room temperature drying @18-22°C, 64-72°F	4 hours
	Stackable after room temperature drying	24 hours with spacers
	Hot air stages tunnel drying (20-40-60°C) (68-104-140°F)	
	complete drying	2 hours
	Stackable after jet hot air drying	8 hours with spacers

(Drying times can vary according to temperature, ventilation and relative humidity)

<b>AVAILABLE SHEENS:</b>	HTMB06B	80 Sheen
	HTMB06H	25 Sheen
	HTMB066	10 Sheen

**ADDITIONAL TIPS:** This product combines the stain, sealer and topcoat all in one product. All that is needed is to apply 3 coats of the same product. It can be used on table tops, furniture, doors, windows, and railings. The performance in sun and rain is exceptional.

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F)

**DATE OF ISSUE:** 2-18, 4-19

IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA HARDWOOD SERIES

**PRODUCT CODE:** PN33/COLOR - see page #8 for list of colors

**PRODUCT NAME:** Klima Water Based Colored Impregnator for Hardwoods

**DESCRIPTION:** Impregnator based on synthetic mono-component resins in water dispersion, specific for coloring and protection of tannin-rich woods.

**USES:** Outdoor/indoor wood items, application on raw wood

**APPLICATION SYSTEM:** In order to reduce swelling of wood surface due to contact with water-based products, it is advisable to sand raw wood before application (150-180sandpaper). Wood surface must be free of dust and from any sap, oil, or resin traces. Raw wood humidity must be below 18%

**FILM THICKNESS:** 0.4-0.5 mils wet

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.010+/-0.02
	Viscosity as supplied (Zahn #2)	14+/- 2 sec
	Solids, by weight:	11+/-2
	May be thinned with water or TZ08	0-5%

**DRYING TIME:** At 70°F with good ventilation, dry to handle: 30 minutes  
(at 20°C/68°F) Sandable, with Scotchbrite or sponge 1-4 hours

(Drying times vary according to temperature, ventilation and relative humidity)  
Minimum temperature during application and drying must be above 60°F

**COATING CYCLES:** Cycle 1 - High Performance - Thixotropic Top Coat

Substrate:	Hardwood
Impregnator:	1 coat PN 33/color- drying time 1-4 hours
Sealer:	1 coat TN40 - drying time 2-4 hours
Top Coat:	1 coat TN931

Cycle 2 - High Performance - Thixotropic Topcoat

Substrate:	Hardwood
Impregnator:	1 coat PN33/color - drying time 1-4 hours
Top Coat as self sealing 1st coat	1 coat TN931
Top Coat:as self-sealing 2nd coat	1 coat TN931

It is possible to obtain custom colors mixing the PZ4/color pastes (PZ402 yellow, PZ406 red, PZ409 black) with the TN340

CONTINUED ON NEXT PAGE...

IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA HARDWOOD SERIES

**PRODUCT CODE:** PN33 Color, page 2

**ADVANTAGES:** PN33/ color does not form a film, thus it doesn't peel. It penetrates deeply into wood fibers, protecting wood from the destructive action of fungi.

Special iron-oxide-based pigments used in the formulation protect the wood from the degrading action of UV rays.

**AVAILABLE COLORS:** PN3011 Fir  
PN3019 Myrtle  
PN310 Teak  
PN320 Lt Walnut  
PN330 Dk Walnut  
PN332 Chestnut  
PN333 Cherry  
PN338 Walnut  
PN340 Antique Walnut  
PN350 Douglas  
PN360 Mahogany  
PN370 Green Wood

**WARNINGS:** KEEP FROM FREEZING!

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUE:** 03-13

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** PN410

**DESCRIPTION:** KLIMA WHITE IMPREGNATOR

**USES:** Expressly developed as initial coat for white or pastel external use. May use on hard or soft woods. TDS500 Isolante recommended under the PN410 for white or pastel colors.

**APPLICATION SSTEM:** Brush or spray

**FILM THICKNESS:** 2.4-3.2 mils wet

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.100+/-0.02
	Viscosity (Iso 3 Cup)	34+/-2
	Solids, by weight:	38 +/-2

<b>DRYING TIME:</b> (at 20°C/68°F)	Dry to touch:	1 hour
	Hard Dry:	1-2 hours

(Drying times vary according to temperature, ventiation and relative humidity)

**COATING CYCLES:** **Cycle 1 - High Quality with Thixotropic Topcoat**

Wood	Soft woods	
Impregnator	1 coat of PN410	drying 1-2 hours
Topcoat	1 coat of PN6B - 8 mils	drying 2-4 hours
Sanding		
Topcoat	1 coat of PN6B - 10 mils	

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 03-13, Revised 2-18, 4-19

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCTS SERIES:** KLIMA SERIES

**PRODUCT CODE:** PN4B

**DESCRIPTION:** **KLIMA AQUATECH PIGMENTED THIXOTROPIC SEALER - WHITE**  
This product is a thixotropic filling sealer based on water-based one-component acrylic resins in water dispersion for wood protection. Allows application of high product thickness in only one-coat, without risk of sagging.

**PRODUCT PREPARATION:** PN4B WB Exterior Primer 100 parts by weight or volume  
Water Thinner 5 parts by weight or 6 parts by volume

**USES:** For outdoor use. Suitable for hardwoods and softwoods.

**APPLICATION SYSTEM:** Brush, spray (air, airmix, airless). If airless spray we recommend diluting 3-5% to help air release during film-forming. For best results use Kremlin 30:1 pump with Aurmix 600 fluid lbs, 35-40 static atomizing air 06134/06154

**FILM THICKNESS:** 8-10 mils wet film

**COATS:** One or two depending on desired build

**GENERAL PROPERTIES:** Specific Gravity, gr/cc 1.20+/- .02  
Viscosity (Brookfield aspd 4 vel.2) 25,000 cps  
Solids, % by weight: 51 +/-2

**DRYING TIME:** Air drying (at room temperature with good ventilation)  
Dry to touch 20 minutes  
Dry to sand: 2 hours  
Dry to handle: 12-16 hours  
Tunnel (35-40°C, 95-104°F) 90 minutes  
(Drying times will vary according to temperature, ventilation and relative humidity)

**COATING CYCLES:** Cycle 1 - Pigmented Coating Cycle with Thixotropic Topcoat - White  
Substrate: Non-bleeding softwoods and hardwoods  
Wood Preservative: 1 coat of PN410, TN340 or TN30  
Sealer 1 coat of PN4B reduced with water -4 hours before sanding  
Sanding Sand using 320 grit steared paper. Avoid high pressure or reduce speed on powered sanding equipment to avoid overheating the waterbase product and loading up sandpaper.  
Topcoat 1 coat of PN6B reduced with water -4 hours drying

**PRODUCT PROPERTIES:** PN 4B sealer is characterized by very good hiding and filling capacity. Highly flexible following dimensional moves of the wood without flaking off. Easy maintenance.

**MAINTENANCE:** Finished items should be lightly sanded with 240 or 320 grit and recoated or topcoated with 1 or 2 coats of PN6B.

**WARNINGS:** KEEP FROM FREEZING!

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 03-13, 7-16, 2-18

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCTS SERIES:** KLIMA SERIES

**PRODUCT CODE:** PN4B

**DESCRIPTION:** **KLIMA AQUATECH PIGMENTED THIXOTROPIC SEALER - WHITE**  
This product is a thixotropic filling sealer based on water-based one-component acrylic resins in water dispersion for wood protection. **Allows application of high product thickness in only one-coat, without risk of sagging.**

**PRODUCT PREPARATION:** PN4B WB Exterior Primer 100 parts by weight or volume  
Water Thinner 5 parts by weight or 6 parts by volume

**USES:** For outdoor use. Suitable for hardwoods and softwoods.

**APPLICATION SYSTEM:** Brush, spray (air, airmix, airless). If airless spray we recommend diluting 3-5% to help air release during film-forming. For best results use Kremlin 30:1 pump with Aurmix 600 fluid lbs, 35-40 static atomizing air 06134/06154

**FILM THICKNESS:** 8-10 mils wet film

**COATS:** One or two depending on desired build

**GENERAL PROPERTIES:** Specific Gravity, gr/cc 1.20+/- .02  
Viscosity (Brookfield aspd 4 vel.2) 25,000 cps  
Solids, % by weight: 51 +/-2

**DRYING TIME:** Air drying (at room temperature with good ventilation)  
Dry to touch 20 minutes  
Dry to sand: 2 hours  
Dry to handle: 12-16 hours  
Tunnel (35-40°C, 95-104°F) 90 minutes  
(Drying times will vary according to temperature, ventilation and relative humidity)

**COATING CYCLES:** Cycle 1 - Pigmented Coating Cycle with Thixotropic Topcoat - White  
Substrate: Non-bleeding softwoods and hardwoods  
Wood Preservative: 1 coat of PN410, TN340 or TN30  
Sealer 1 coat of PN4B reduced with water -4 hours before sanding  
Sanding Sand using 320 grit steared paper. Avoid high pressure or reduce speed on powered sanding equipment to avoid overheating the waterbase product and loading up sandpaper.  
Topcoat 1 coat of PN6B reduced with water -4 hours drying

**PRODUCT PROPERTIES:** PN 4B sealer is characterized by very good hiding and filling capacity. Highly flexible following dimensional moves of the wood without flaking off. Easy maintenance.

**MAINTENANCE:** Finished items should be lightly sanded with 240 or 320 grit and recoated or topcoated with 1 or 2 coats of PN6B.

**WARNINGS:** KEEP FROM FREEZING!

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 03-13, 7-16, 2-18

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**  
**(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** PZ400 Series

**DESCRIPTION:** Pigmented Pastes for Water Based Impregnators

**USES:** To tint and color water based impregnators for outdoor use

**GENERAL PROPERTIES:** Specific Gravity, gr/cc+/-02

<b>AVAILABLE COLORS:</b>	PZ402	Yellow Oxide	1.150
	PZ404	Brown	1.360
	PZ405	Bright Red	1.200
	PZ406	Green	1.050
	PZ409	Black	1.200

**NOTES:** For deeper colors use PZ5xx pastes, up to 5% - see page # for list of PZ5xx colors. We recommend mechanical mixing before use for every paste to precisely duplicate color matches. Weighing of tints is important. We recommend using pastes PZ400 series for tinting impregnators started from base TN30 (clear) with a maximum addition is 3%  
**KEEP FROM FREEZING!**

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 03-13, 2-18

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TDS500

**DESCRIPTION:** Stain blocking isolator for exterior use with Klima Technology

<b>PRODUCT PREPARATION:</b>		<b><u>Parts by Weight</u></b>	<b><u>Parts by volume</u></b>
TDS500 Stain Blocking Isolator		100 parts	128 ounces
TX90 Hardener		40 parts	50 ounces
TZ33 Thinner for Spray		10-20 parts	12-25 ounces
TZ13 Thinner for Brush		10-20 parts	12-25 ounces

**USES:** Solvent Based clear isolator for substrates rich in tannins and resins. Use with ILVA Klima water based cycles clear and pigmented. For use with outdoor applications to stop bleeding

**APPLICATION SYSTEM:** Spray, Airless., airmix, brush

**FILM THICKNESS:** 5-6 mils wet

**COATS:** One

<b>GENERAL PROPERTIES:</b>		
Specific Gravity, gr/cc		.970+/- .020 g/ml
Viscosity at application (Zahn #2)		25+/-2
Pot Life		3 hours max with hardener added

<b>DRYING TIME: (at 20°C/68°F)</b>		
At room temperature:		20 mins dust free
Dry to touch		2 hours
Hard dry at room temperature		24 hours
Sandable to recoat (minimum after)		3 hours

**NOTES:** Apply PN tinted stain series or TN clear impregnator to the wood surface, selecting soft or hardwood series. When Impregnator is completely dry (min 2h), apply 1 coat of TDS500 stain blocker. Sand with 220 grit. Then apply 2/3 heavy coats of Klima topcoat TN931 series, or Klima PN6B or Klima pigmented coating. Klima top coats must have a total of 20 mils wet applied for maximum protection.

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 11-13, Revised 11-15, 2-18, 3-18

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.



## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TN0/600

**DESCRIPTION:** **Klima Wax with special no slip waxes**  
**Acrylic resin impregnator in water dispersion, enriched with special, non-slip protective waxes, specific for staining and protection of wood.**

**USES:** Klima Wax line of products has been specifically formulated to protect outdoor wood items, including gazebos, arbors, fences, benches, decks, and sidings. The addition of 1% TXW02 crosslinker will improve wear resistance on deck surfaces.

**APPLICATION SYSTEM:** Brush.  
It is advisable to apply two to three coats by brush depending upon the degree of staining and protection desired. Raw wood humidity must be below 18%.

**FILM THICKNESS:** 3-4 mils wet per coat, depending on wood preparations and species

**COATS:** Two or three

### GENERAL

**PROPERTIES:** Specific Gravity, gr/cc 1.025+/- .02  
Viscosity at application (Zahn #2) 16+/-2

**DRYING TIME:** At 70°F with ventilation, dry to handle: 30 minutes  
(at 20°C/68°F) Time between coats 2-4 hours  
(Drying times vary according to temperature, ventilation and relative humidity)  
Before using coated items, it is advisable to wait 48 hours

**COATING CYCLES:** TN0/600 to color Brush application  
Drying time 2-4 hours room temperature  
TN0/600 to color Brush application  
3rd coat of color if needed

**AVAILABLE COLORS:** It is possible to obtain custom colors mixing the clear impregnator TN0/600 with the pigmented pastes of the PZ400/series

**FEATURES:** Do not use below 50°F or in very high humidity. Klima Wax impregnating finishes series offer top-level protection against weathering environments. They deeply penetrate into wood fibers, protecting it from well-known bacterial enemies of wood: fungi, molds, and parasites. The special, non-slip waxes employed provide the coating film with a strong water-repellent power, combined with special iron oxide pigments within the formulation. The waxes and stains also protect wood from being damaged by ultra-violet rays.

**WARNINGS:** KEEP FROM FREEZING

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F)

**DATE OF ISSUANCE:** 3-13, Revised 7-16, 2-18

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**  
**(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TN30

**DESCRIPTION:** Water Based Protective Soft Wood Impregnator

**USES:** Best protection is achieved using this impregnator specially formulated for softwoods. Use on windows, doors, casings, railings, decks, and outdoor furniture. Designed to protect against biological agents (fungus, bacteria, mold).

**APPLICATION SYSTEM:** Spray, Dip, Brush, Flow Coat

**FILM THICKNESS:** 1.6-2.4 mils wet by hand; max total 4 mils wet per coat

**COATS:** One

**GENERAL PROPERTIES:** Specific Gravity, gr/cc 1.040+/-2  
Viscosity at application (Zahn #2) 17+/-2  
Thinner TZ08 as retarder at max 5%

**DRYING TIME:** At room temperature: 12 hours  
(at 20°C/68°F) Time between coats 24 hours  
(Drying times change according to temperature, ventilation and relative humidity)

**TYPICAL SYSTEM:**

Substrate	Various woods	
TN30 Klima Series	1 - 2 coats	300-400 sq ft per gallon
Drying	1-4 hours between coats	
Sanding	very light with scotchbrite or fine sponge	
Sealer	TN40 or topcoat TN931 as self-sealer	1 coat
Drying	2-4 hours	
Topcoat	TN931	

**NOTES:** Do not use below 50°F or with very high humidity

Mix products thoroughly before use.

When using exotic and resinous wood, prepare substrate by removing excess sap or oils

Colors in the PZ4 Klima series can be mixed to obtain various tones. Excessive impregnator or runs should be evened out with brush in first moments after application.

KEEP FROM FREEZING!

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 03-13, 2-18, 4-19

IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TN340

**DESCRIPTION:** Water Based Protective Hard Wood Impregnator

**USES:** Best protection is achieved using this impregnator specially formulated for hardwoods. Use on windows, doors, casings, railing, decks, and outdoor furniture. Designed to protect against biological agents (fungus, bacteria, mold).

**APPLICATION SYSTEM:** Spray, Dip, Brush, Flow Coat

**FILM THICKNESS:** 3-4 wet mils

**COATS:** One

**GENERAL PROPERTIES:**

Specific Gravity, gr/cc	1.004+/-0.02
Viscosity (Zahn #2)	12+/-2 sec.
Solids, % by weight:	9 +/-2
Thinner:	water at 0-5% or TZ08 as retarder at max 5%

**DRYING TIME:**  
(at 20°/68°F)

Air drying  
Dry to touch: 30 minutes  
Sandable: 2-4 hours  
(Drying times vary according to temperature, ventilation and relative humidity)

**COATING CYCLES:** Cycle 1 - High Quality - Thixotropic Topcoat

Substrate: Hardwoods  
Impregnator: 1 coat TN340 + PZ4 pastes - drying time 1-2 hours  
Sealer - intermediate: 1 coat TN45 - drying time 2-4 hours  
Sealer: 1 coat TN40 - drying time 2-4 hours  
sanding (grain 220-280)  
Topcoat: 1 coat TN931

Cycle 2 - General Use - Thixotropic Topcoat

Substrate: Hardwoods  
Impregnator: 1 coat TN340+ PZ4 pastes - drying time 1-2 hours  
very light sanding  
Topcoat 1 coat TN931  
Topcoat 1 coat TN931

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 03-13, 2-18, 4-19

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TN370

**DESCRIPTION:** Water Based Protective Exotic Oily Wood and Tanin Rich Impregnator

**USES:** Best protection is achieved using this impregnator specially formulated for exotic oily and tanin rich woods. Use on windows, doors, casing, railings, decks, and outdoor furniture. Designed to protect against biological agents (fungus, bacteria, mold).

**APPLICATION SYSTEM:** Dip, Brush, Spray

**FILM THICKNESS:** 3- 4 mils wet

**COATS:** One

### GENERAL

**PROPERTIES:** Specific Gravity, gr/cc 1.020+/-0.01  
Viscosity (Zahn #2) 12 +/-2 sec.

**DRYING TIME:** Air drying (at room temperature with good ventilation)  
(at 20°/68°F) Drying schedule: 1-2 hours  
Time between coats 2-4 hours  
(Drying times can vary according to temperature, ventilation and relative humidity)

### COATING CYCLES:

#### A)

Substrate: Iroko, green hart, etc hardwoods  
Staining: TN370 + PZ4 pastes - 1 coat  
Drying: 1-2 hours  
Base Coat: TN40 - 1 coat  
Sanding: Very light brushing or sanding w/ 220 or 280 grit  
Topcoat: TN931 - 1 coat

#### B)

Substrate: Iroko, greenhard, etc. hardwoods  
Staining: TN370 + pastes  
Drying: 12 hours  
Topcoat: TN931 1-2 hours as self-sealer 1 coat  
Drying: 12 hours  
Sanding: Very light brushing or sanding w/220 or 280 grit  
Topcoat: TN931 as self sealer 1 coat

CONTINUED ON NEXT PAGE...

IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TN370 - page 2

**NOTES:** In order to achieve the best outdoor performance we suggest you use impregnators with color; neutral products decrease the protection level.  
Mix cans thoroughly before use.  
Keep from freezing

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 03-13, 2-18, 4-19

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TN40

**DESCRIPTION:** Klima Water Based Clear Wood Tone Clear Sealer  
Thixotropic filling sealer based on water-based one-component sanding sealer using synthetic resins for wood protection. Allows application of high product thickness with only one coat without risk of running or sagging.

**USES:** For outdoor and indoor use, pre-coated with KLIMA series Aquatech impregnating stains.

**APPLICATION SYSTEM:** Brush, spray (air, airmix, airless)

**FILM THICKNESS:** 7-9 mils wet

**COATS:** One

### GENERAL

**PROPERTIES:**

Specific Gravity, gr/cc	1.030+/-0.02
Viscosity as supplied*	17,000-19,000
Solids, % by weight:	35 +/-2
Thinner:	Water or TZ07 for spray or TZ08 for brush
% of dilution:	0-5%

\*(Brookfiled Aspo 4 speed 2.5)

**DRYING TIME:** At 20°C with ventilation, dry to handle:

**(at 20°C/68°C)**

Dust Free:	20 minutes
Dry to touch:	1 hour
Full dried:	2-4 hours
Sanding:	4-6 hours

(Drying times may vary according to temperature, ventilation and relative humidity)

**COATING CYCLES:** Cycle 1 - High Quality with Thixotropic Topcoat

Substrate	Pine or softwoods
Impregnating:	PN 3/color - 1 coat - 2 hours drying
Sealer:	TN40 - 1 coat - 2 hours before sanding
Topcoat:	TN931 - 1 coat

Before using finished coated items, it is advisable to wait 48 hours

CONTINUED ON NEXT PAGE...

IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TN40, page 2

**PRODUCT PROPERTIES:** TN40 Sealer is characterized by very good covering power (intended as filling capacity) joined to an easy sanding. Highly flexible film allows for the movement of wood without flaking off. It is also easy to maintain.

**MAINTENANCE:** Previously finished items should be lightly sanded with 280 or 320 grit and re-coated.

**WARNINGS:** KEEP FROM FREEZING

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F)

**DATE OF ISSUANCE:** 03-13, 2-18, 4-19

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TN931

**DESCRIPTION:** **KLIMA WB Wood Tone Satin Topcoat**  
**Thixotropic topcoat based on acrylic based resins in water dispersion for wood protection. Suitable for hardwoods and softwoods.**

**USES:** For outdoor use, pre-coated with KLIMA series Aquatech impregnating stains and sealers. May be used over TN40 Sealer or as a self-sealer.

**PRODUCT PREPARATION:**

TN931	WB Wood Tone Self-Sealer	100 parts by weight or volume
Water	Thinner	5 parts by weight or volume

**APPLICATION SYSTEM:** For best results use Kremlin 30:1 pump with Airmix 600 fluid lbs, 35-40 static atomizing air 06134/06154 tips or use conventional, pressure pot, cup gun or apply by roller or brush. To brush use TZ08 at 5%.

**FILM THICKNESS:** 7 mils wet per coat, for a total of 14 mils wet.

**COATS:** 2 coats to achieve minimum wet film thickness of 14 mils.

**GENERAL PROPERTIES:**

Specific Gravity, gr/cc	1.050+/-0.02
Viscosity as supplied*	38,000-41,000 cps
Solids, % by weight:	40 +/-2
Thinner:	Water - TZ07 or TZ08
% of dilution:	5-20% depending upon equipment

\* (Brookfield Aspo n<sup>4</sup> vel 2.5)

**DRYING TIME:** (at 20°C/68°F)

Air Dry with ventilation, dry to handle:	
Dust Free:	20 minutes
Dry to touch:	1 hour
Full dried:	2-4 hours
Sanding:	2-4 hours

(Drying times can vary according to temperature, ventilation and relative humidity)

**COATING CYCLES:** **Cycle 1 - High Quality with Thixotropic Topcoat**

Substrate	Pine or soft woods
Impregnating:	PN 3/color - 1 coat - 1-2 hours drying
Sealer:	TN40 - 1 coat - 2-4 hours before sanding
Topcoat:	TN931 - 1 coat

Before using coated items, it is advisable to wait 3 days. Minimum room temperature during application and drying should be 60°F

CONTINUED ON NEXT PAGE...

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**  
**(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.



## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TN931, page 2

**COATING CYCLES:** Cycle 2 - General use as self-sealer

Substrate Pine or soft woods  
Impregnating: PN 3/color - 1 coat - 1-2 hours drying  
Light Sanding with scotchbrite  
Topcoat: TN931 - 1 coat - dry 2-4 hours - sand with 280 grit  
Topcoat: TN931 - 1 coat

**PRODUCT PROPERTIES:** This product improves the protective action of the impregnating products and protects the substrate from photochemical degradation thanks to the presence of special UV absorbers. Soft to the touch and highly flexible, no sanding when applying coat for maintenance so as to allow easy maintenance.

**MAINTENANCE:** Items already coated with TN931 topcoat should have dirt and other residuals removed and be topcoated with the Klima TN030 products.

**WARNINGS:** Keep from Freezing!

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 03-13, Revised 6-15, 2-18, 4-19

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TN931/00

**DESCRIPTION:** KLIMA WB Clear Satin Topcoat  
Thixotropic topcoat based on acrylic based resins in water dispersion for wood protection. Recommended to add PZ4xx colorant at 0.1-0.5% to enhance performance, or add up to 10% PZ5xx colorant to make deep tone colors. Not intended to be used as a clear finish, as it will amber, and without pigment, performance will suffer.

**USES:** For outdoor use, pre-coated with KlimaAquatech series impregnating stains and sealers. May be used over TN40 Sealer or as a self-sealer.

**PRODUCT PREPARATION:**

TN931/00	WB Clear Topcoat	100 parts by weight or volume
Water	Thinner	5 parts by weight or volume

**APPLICATION SYSTEM:** For best results use Kremlin 30:1 pump with Airmix 600 fluid lbs, 35-40 static atomizing air 06134/06154 tips or use conventional, pressure pot, cup gun or apply by roller or brush. To brush use PX0/03 at 2-3%.

**FILM THICKNESS:** 7 mils wet per coat, for a total of 14 mils wet.

**COATS:** 2 coats to achieve minimum wet film thickness of 14-16 mils

**GENERAL PROPERTIES:**

Specific Gravity, gr/cc	1.029+/-0.02
Viscosity as supplied*	38,000-41,000 cps
Solids, % by weight:	40 +/-2
Thinner:	Water or PX0/03
% of dilution:	Water at 5-20% depending upon equipment
	PX0/03 at 2-3%

\* (Brookfield Aspo n<sup>o</sup>4 vel 2.5)

**DRYING TIME:** Air Dry with ventilation, dry to handle:  
(at 20°C/68°F)

Dust Free:	20 minutes
Dry to touch:	1 hour
Full dried:	2-4 hours
Sanding:	2-4 hours

(Drying times can vary according to temperature, ventilation and relative humidity)

**COATING CYCLES:** Cycle 1 - High Quality with Thixotropic Topcoat

Substrate	Pine or soft woods
Impregnating:	PN 3/color - 1 coat - 1-2 hours drying
Sealer:	TN40 - 1 coat - 2-4 hours before sanding
Topcoat:	TN931/00 - 1 coat

Before using coated items, it is advisable to wait 3 days. Minimum room temperature during application and drying should be 60°F

IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TN931/00

**COATING CYCLES:** Cycle 2 - General use as self-sealer

Substrate Pine or soft woods  
Impregnating: PN 3/color - 1 coat - 1-2 hours drying  
Light Sanding with scotchbrite  
Topcoat: TN931/00 - 1 coat - dry 2-4 hours - sand with 280 grit  
Topcoat: TN931/00 - 1 coat

**PRODUCT  
PROPERTIES:**

This product improves the protective action of the impregnating products and protects the substrate from photochemical degradation thanks to the presence of special UV absorbers. Soft to the touch and highly flexible, no sanding when applying coat for maintenance so as to allow easy maintenance.

**MAINTENANCE:** Items already coated with TN931/00 topcoat should have dirt and other residuals removed and be topcoated with the Klima TN030 products.

**WARNINGS:** Keep from Freezing!

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18-25 °C/64-75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 03-18, 4-19

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TN030

**DESCRIPTION:** Klima Regenerator Clear Coat

**USES:** Used as a field maintenance product. Typically used once a year, or when necessary, on windows, doors, shutters or furniture. Product helps to maintain original performance.

**APPLICATION SYSTEM:** Clean with water and neutral detergents to remove dust and rain spots. Cleaning products containing acids or ammonia must be absolutely avoided, as they would attack the coating and damage it. If after the cleaning operations, the coating film appears to be in good condition (no cracking), we suggest proceeding with the application of TN030 Regenerator, wiping a cloth soaked in the TN030 on the entire surface.

**FILM THICKNESS:** 0.8-1.6 mils wet

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.013+/- .03
	Viscosity as supplied (EN ISO 2431) ISO 3 cup	26 +/-2
	Solids, % by weight:	14+/-2
	Thinner:	Water
	% of dilution:	0-5%

**DRYING TIME:** At 20°C with ventilation, dry to handle:  
(at 20°C/68°F)

Dust Free:	2 hours
Dry to touch:	12 hour
Full dried:	24 hours

(Drying times may vary according to temperature, ventiation and relative humidity)

**WARNINGS:** KEEP FROM FREEZING

**SHELF LIFE:** 12 months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F)

**DATE OF ISSUANCE:** 2-18

IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** TN090

**DESCRIPTION:** Klima Honeytone Maintenance by Brush

**USES:** Used as a field maintenance product for wood tone finishes

**APPLICATION SYSTEM:** When doing a complete restoration, remove the damaged coating using 150-180 grit sand paper. Further prepare the wooden surface by sanding down with 240 grit paper to bare wood. Using a brush, apply the desired color impregnator and let dry for at least 4 hours. Next, apply 2 layers of TN090 Maintenance Coat by brush.

**FILM THICKNESS:** 3.2-4 mils wet

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.038+/-0.03
	Viscosity as supplied (Ford 4 cup)	83 +/-5
	Solids, % by weight:	40.5 +/-2
	Thinner:	Water
	% of dilution:	0-5%

**DRYING TIME:** At 20°C with ventilation, dry to handle:  
(at 20°C/68°F) Dust Free: 20 minutes  
Dry to touch: 4 hours  
Full dried: 72 hours

(Drying times may vary according to temperature, ventilation and relative humidity)

**WARNINGS:** KEEP FROM FREEZING

**SHELF LIFE:** 12 months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F)

**DATE OF ISSUANCE:** 2-18

IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** KLIMA SERIES

**PRODUCT CODE:** WNS321

**DESCRIPTION:** KLIMA NANO-TECH WB WHITE IMPREGNATOR

**USES:** Expressly developed as initial coat for white or pastel external use. May use on hard or soft woods. TDS500 Isolante recommended under the WNS321 for white or pastel colors. Very good insulating and adhesion properties.

**APPLICATION SSTEM:** Brush or spray

**FILM THICKNESS:** 2.4-3.2 mils wet

**COATS:** One

**GENERAL PROPERTIES:**

Specific Gravity, gr/cc	1.040+/-0.03
Viscosity (Iso 3 Cup)	25+/-2
Solids, by weight:	32 +/-2

**DRYING TIME:** Dry to touch: 1 hour  
(at 20°C/68°F) Hard Dry: 1-2 hours

(Drying times vary according to temperature, ventialtion and relative humidity)

**COATING CYCLES:** Cycle 1 - High Quality with Thixotropic Topcoat

Wood	Soft woods	
Impregnator	1 coat of WNS321	drying 1-2 hours
Sealer	1 coat of WSS503 - 8 mils	drying 2-4 hours
Sanding		
Topcoat	1 coat of WTM5883 - 10 mils	

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 4-19

IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCTS SERIES:** KLIMA SERIES

**PRODUCT CODE:** WSS503

**DESCRIPTION:** **KLIMA AQUATECH PIGMENTED THIXOTROPIC SEALER - WHITE**  
This product is a thixotropic filling sealer based on water-based one-component acrylic resins in water dispersion for wood protection. Allows application of high product thickness in only one-coat, without risk of sagging.

**PRODUCT PREPARATION:** WSS503 WB Exterior Primer 100 parts by weight or volume  
Water Thinner 5 parts by weight or 6 parts by volume

**USES:** For outdoor use. Suitable for hardwoods and softwoods.

**APPLICATION SYSTEM:** Brush, spray (air, airmix, airless). If airless spray we recommend diluting 3-5% to help air release during film-forming. For best results use Kremlin 30:1 pump with Aurmix 600 fluid lbs, 35-40 static atomizing air 06134/06154

**FILM THICKNESS:** One coat minimum, 8 mils wet film

**GENERAL PROPERTIES:** Specific Gravity, gr/cc 1.20+/-0.03  
Viscosity (Brookfield aspd 4 vel.2) 20,000 cps +/- 3000 CpS  
Solids, % by weight: 50 +/-2

**DRYING TIME:** Air drying (at room temperature with good ventilation)  
Dry to touch 2 hours  
Dry to sand: 24 hours  
Tunnel (35-40°C,95-104°F) 4 hours  
(Drying times will vary according to temperature, ventilation and relative humidity)

**COATING CYCLES:** Cycle 1 - Pigmented Coating Cycle with Thixotropic Topcoat - White  
Substrate: Non-bleeding softwoods and hardwoods  
Wood Preservative: 1 coat of WNS321, TN340 or TN30  
Sealer 1 coat of WSS503 reduced with water -24 hours before sanding  
Sanding Sand using 320 grit steared paper. Avoid high pressure or reduce speed on powered sanding equipment to avoid overheating the waterbase product and loading up sandpaper.  
Topcoat 1 coat of WTM5883 reduced with water -4 hours drying

**PRODUCT PROPERTIES:** WSS503 sealer is characterized by very good hiding and filling capacity. Highly flexible following dimensional moves of the wood without flaking off. Easy maintenance.

**MAINTENANCE:** Finished items should be lightly sanded with 240 or 320 grit and recoated or topcoated with 1 or 2 coats of WTM5883.

**WARNINGS:** KEEP FROM FREEZING!

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 4-19

IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.

## ILVA TECHNICAL DATA SHEET

**PRODUCTS SERIES:** KLIMA SERIES

**PRODUCT CODE:** WTM5883

**DESCRIPTION:** KLIMA WHITE THIXOTROPIC TOPCOAT  
This product is a thixotropic topcoat based on acrylic resins in water dispersion for wood protection. Allows application of high film build without risk of running or sagging.

**USES:** For outdoor use, pre-coated with Klima Aquatech series impregnating stains and sealers.

**PRODUCT PREPARATION:** WTM5883 KLIMA W/B White Matte Finish 100 parts by weight or volume  
Water Thinner 5 parts by weight or 6 parts by volume

**APPLICATION SYSTEM:** For best results use Kremlin 30:1 pump with Airmix 600 fluid lbs, 35-40 static atomizing air 06134/06154 tips or use conventional, pressure pot, cup gun or apply by roller or brush

**FILM THICKNESS:** 10 mils wet

**COATS:** One coat if used over WSS503 Primer and two coats if used as a self-sealer

**GENERAL PROPERTIES:** Specific Gravity, gr/cc 1.16+/- .03  
Viscosity (Brookfield aspo 4 vel.2) 29,000 cPs +/-4500 cPs  
Solids, % by weight: 41.5 +/-2  
Gloss: 30+/-2

**DRYING TIME:** Air drying  
Dry to touch 4 hours  
Dry to sand: 4 hours  
Full dried: 72 hours  
Stackable after room temperature drying 48 hours (with spacers)  
(Drying times will vary according to temperature, ventilation and relative humidity)

**COATING CYCLES:** Cycle 1 - Pigmented Coating Cycle with Thixotropic Topcoat - White  
Substrate: Non-bleeding soft and hardwoods  
Wood Preservative: 1 coat of WNS321  
Sealer 1 coat of WSS503 or WTM5883 - drying time 4 hours  
Topcoat 1 coat of WTM5883

**PRODUCT PROPERTIES:** WTM5883 is characterized by very good hiding and filling. Improves protection against weathering and UV deterioration. Soft to the touch, highly flexible, will follow dimensional movement of wood without cracking or flaking off, so as to allow easy maintenance.

**MAINTENANCE:** Previously finished items should be lightly sanded w/280 or 320 grit and recoated.

**WARNINGS:** KEEP FROM FREEZING!

**SHELF LIFE:** 12 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material. Do not store at temperatures below 7°C (45°F).

**DATE OF ISSUANCE:** 4-19

IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.



## HELPFUL HANDLING & MIXING INSTRUCTIONS

### FOR GREEN HART, IROKO, CEDAR AND SIMILAR WOODS THAT BLEED:

The use of a solvent base barrier coat is necessary to block the bleeding of tannins on some types of exotic hardwoods and softwoods. Product code TDS500, a two component acrylic solvent base isolator, is recommended.

### APPLICATION METHOD:

Klima waterbase products may be applied by spray, brush, and flow coater, in some cases. See the individual item tech data sheet for more information. If retarding is necessary due to high temperature or for flowout or brush application, we recommend using our PX0/03 retarder. Use at 1%-5% in impregnators and 1%-3% in coating products. An alternative retarder is our code TZ88 at 1%-3%. TZ88 is a blend of water/TZ08 at 80/20. Do not apply water base products below 64°F or 16°C.

### DRYING:

All waterbase products require good ventilation for drying. The use of fans will dramatically improve dry times during factory application. Do not put finished pieces directly in air flow from the fan while coating is still wet.

Providing sealer and topcoat films are not sticking to the sandpaper, the coatings may be sanded. A good rule of thumb is if you can flick the sandpaper with your finger and all the dust comes off, it is ok to sand. Indications regarding sandpaper sizes are optional. The finer the grit, the smoother the finishes will be. All Klima products will tend to hide sand marks due to their filling properties.

Drying times of Klima coatings will be increased on wood that has poor absorption characteristics and by cold, wet weather. It is always advisable to run short tests with these products to verify if the result obtained is suitable. Wait for a minimum of 3 days before installing factory applied finishes.

If doing an onsite exterior application or if factory applied finishes are installed before completely cured, you may experience white spots or hazing of the film from early exposure to precipitation or cold weather. This is normal and will generally correct itself. Do not touch, but allow the film to dry and reach normal temperature drying conditions.

### CROSSLINKER:

TXW02 Crosslinker may be added to any of the Klima products at a level of 1%. It will provide the following benefits:

- \* Crosslinked properties obtained at room temperature
- \* Improve chemical, water, alcohol, detergent and abrasion resistance in coatings
- \* Improve stain and block resistance
- \* Improve adhesion on difficult to wet substrates

### GENERAL INFORMATION:

Do not use steel wool for sanding the raw wood since residual metal dust can cause rust spots. In the case of exotic and resinous woods, clean the substrate well before coating. For better color uniformity, clean with a dry brush or rag after 15-30 minutes in order to remove excess product not absorbed. When recoating previous coatings, it is best if all of the old film is completely removed by sanding or stripping. Hardwoods usually need a superior number of coats.

### RECOMMENDED STORAGE

All water based products should be stored in tightly closed containers at temperatures above 41°F

**Date of Issuance:** 03-13, Revised 2-18, 5-18, 4-19, 6-20

6-4-2020

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605  
(800) 220-4035**

EVERY REASONABLE PRECAUTION IS TAKEN IN THE MANUFACTURE OF OUR PRODUCTS TO INSURE THAT THEY COMPLY WITH OUR STANDARDS. INFORMATION GIVEN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. ANY SUGGESTIONS MADE BY US COVERING THE USE OF OUR PRODUCTS ARE BASED ON EXPERIENCE AND/OR TESTS BELIEVED TO BE RELIABLE. HOWEVER, BECAUSE THE USE OF ANY PRODUCT OF OUR MANUFACTURE IS COMPLETELY BEYOND OUR CONTROL, INCLUDING FOR EXAMPLE, THE METHOD AND CONDITIONS OF APPLICATION, NO GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE. MANUFACTURER'S MAXIMUM LIABILITY SHALL BE TO REPLACE SUCH QUANTITY OF PRODUCT DETERMINED BY OUR LABORATORY TO BE DEFECTIVE. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS INTENDED USE AND ASSUME ALL RISK AND LIABILITY IN CONNECTION THEREWITH.