



**HIGH PERFORMANCE  
INDUSTRIAL  
WOOD COATINGS**

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

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

# **Table of Contents**

Typical Systems	4-24
TX Polyurethane Hardener Chart	25
Thinner Chart	26
Technical Data Sheets	27-68
Pigmented Pastes	69
Troubleshooting Tips	70-74
Buffing & Polishing Tips	75-77
Proper Care	78
Index	79

# HIGH PERFORMANCE INDUSTRIAL COATINGS

## GROUP "P" (Pigmented)

<b>PF</b>	CONCENTRATED DYES AND SPRAY STAINS
<b>PG</b>	PIGMENTED STAINS
<b>PI</b>	POLYESTER PIGMENTED PRIMERS
<b>PL</b>	POLYURETHANE MATTE FINISHES
<b>PM</b>	POLYURETHANE GLOSS FINISHES
<b>PN</b>	PENETRATING STAINS FOR EXTERIOR EXPOSURE
<b>PO</b>	PIGMENTED POLYESTER UV FINISHES, GLOSS AND MATTE
<b>PX</b>	ADDITIVES AND AUXILIARIES
<b>PZ</b>	TINTING COLOR PASTES

## GROUP "T" (Clears)

<b>TA</b>	TRANSPARENT POLYURETHANE PRIMERS AND SEALERS
<b>TC</b>	TRANSPARENT PARAFFINED POLYESTERS
<b>TD</b>	TRANSPARENT UV CURED PARAFFINED POLYESTERS
<b>TE</b>	UV PRIMERS AND SEALERS FOR ROLLER AND REVERSE
<b>TF</b>	ADHESION PROMOTING PRIMERS AND SPECIAL SEALERS
<b>TG</b>	TRANSPARENT POLYESTER PRIMERS AND SEALERS
<b>TK</b>	UV CURED FINISHES, MATTE AND GLOSS, FOR CURTAIN AND SPRAY
<b>TL</b>	UV CURED FINISHES FOR ROLLER AND REVERSE ROLLER
<b>TM</b>	DOUBLE FUNCTION (PRIMER AND FINISH) POLYURETHANES
<b>TN</b>	CLEAR FINISHES AND PRIMERS FOR EXTERIOR EXPOSURE
<b>TO</b>	TRANSPARENT MATTE POLYURETHANE FINISHES
<b>TP</b>	TRANSPARENT GLOSS POLYURETHANE FINISHES
<b>TR</b>	TRANSPARENT POLYESTER FINISHES
<b>TS</b>	TRANSPARENT ACRYLIC FINISHES

## ADDITIVES AND SOLVENTS

<b>TV</b>	CATALYSTS, ACCELERATORS AND PHOTOINITIATORS
<b>TX</b>	HARDENERS FOR POLYURETHANES
<b>TZ</b>	THINNERS

## Clear Polyurethane Open-pore System (various sheens)

### Step 1: *Polyurethane Sealer*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TA03	Polyurethane sealer	100	128
TX50*	Hardener	50	64
TZ33	Thinner	0-10	0-20
* Use TX75 for non-yellowing		40	50

Pot life: 3-4 hours

Dry to handle: 30-40 minutes

Application: Spray on a coat of sealer. If a second coat of sealer is required it can be applied after one hour without sanding. If it is not applied within three hours, you must wait eight hours, sand the sealer with 320 paper, blow the residue from the panel, then apply the second coat of sealer. Allow 8 hours cure time before sanding and top coating.

Tip size: 1.8

Air pressure: 35 lbs

### Step 2: *Polyurethane Finish*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
T09 Series	Polyurethane Finish	100	128
TX24*	Hardener	50	64
TX50*	Hardener (for slightly faster dry)	50	64
TZ13**	Thinner	10-30	10-30
* Use TX75 for non-yellowing.		40	50

\*\*TZ418 can be added to TZ13 in hot, humid weather to avoid pinholes and bubbles.

Pot life: 3-4 hours

Dry to handle: 30-40 minutes

Application: After 8 hours sand sealer with 320 sand paper. A second light sanding is recommended with 400 grit for optimum results in high gloss. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish.

Tip size: 1.8

Air pressure: 35 lbs

## Clear Polyurethane Hi-Build System with Ultra Clear Sealer

**Step 1:** *PF 5/series Stains for Color*

**Step 2:** *Ultra Clear Polyurethane Sealer*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TA44	Polyurethane sealer	100	128
TX11*	Hardener	50	64
TZ33**	Thinner	0-15	0-30

\*Use TX19 in hot, humid weather to avoid pinholes and bubbles. Use TX1511 for HAPS-Compliance

\*\*TZ13 may be needed in hot weather to slow dry. Use "NH" solvent version for HAPS-Compliance

**Pot life:** 3-4 hours

**Dry to handle:** 30-40 minutes

**Application:** Spray on a coat of sealer. If additional coats of sealer are required they can be applied one hour after previous coat without sanding. If it is not applied within three hours, you must wait eight hours, sand the sealer with 320 paper, blow the residue from the panel, then apply the next coat of sealer. Allow 8 hours cure time before sanding and top coating.

**Tip size:** 1.8

**Air pressure:** 35 lbs

**Step 3:** *Polyurethane Finish*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
T09/series	Polyurethane Finish	100	128
TX24*	Hardener	50	64
TZ13**	Thinner	10-30	10-30

\* Use TX75 for non-yellowing

40

50

\*\*Use TZ425 or TZ4223 in hot, humid weather to avoid pinholes and bubbles. Use TZ13NH for HAPS-Compliance.

**Pot life:** 3-4 hours

**Dry to handle:** 30-40 minutes

**Application:** After 8 hours sand sealer with 320 sand paper. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish.

**Tip size:** 1.8

## Clear Polyurethane Hi-Build System

**Step 1:** *PF 5/series Stains for Color*

**Step 2:** *Polyurethane Sealer*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TA48	Polyurethane sealer	100	128
TX11*	Hardener	50	64
TZ33**	Thinner	0-15	0-30

\*Use TX19 in hot, humid weather to avoid pinholes and bubbles. Use TX1511 for HAPS-Compliance

\*\*TZ13 may be needed in hot weather to slow dry. Use "NH" solvent version for HAPS-Compliance

**Pot life:** 3-4 hours

**Dry to handle:** 30-40 minutes

**Application:** Spray on a coat of sealer. If additional coats of sealer are required they can be applied one hour after previous coat without sanding. If not applied within three hours, you must wait eight hours, sand the sealer with 320 paper, blow the residue from the panel, then apply the next coat of sealer. Allow 8 hours cure time before sanding and top coating.

**Tip size:** 1.8

**Air pressure:** 35 lbs

**Step 3:** *Polyurethane Finish*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
T09/series	Polyurethane Finish	100	128
TX24*	Hardener	50	64
TZ13**	Thinner	10-30	10-30

\* Use TX75 for non-yellowing

40

50

\*\*Use TZ425 or TZ4223 in hot, humid weather to avoid pinholes and bubbles. Use TZ13NH for HAPS-Compliance.

**Pot life:** 3-4 hours

**Dry to handle:** 30-40 minutes

**Application:** After 8 hours sand sealer with 320 sand paper. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish.

**Tip size:** 1.8

## HAPS Compliant Clear Polyurethane Hi-Build System

### Step 1: PF 5/series Stains for Colors

### Step 2: Polyurethane Sealer

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TA48	Polyurethane Sealer	100	128
TX1511*	Hardener	50	64
TZ33NH**	Thinner	0-10	0-20

\*Use TX19 on hot, humid weather to avoid pinholes and bubbles.

\*\*TZ13NH may be needed in hot weather to slow dry

**Pot life:** 3-4 hours

**Dry to handle:** 30-40 minutes

**Application:** Spray on a coat of sealer. If additional coats of sealer are required they can be applied one hour after previous coat without sanding. If not applied within three hours, you must wait eight hours, sand the sealer with 320 paper, blow the residue from the panel, then apply the next coat of sealer. Allow 8 hours cure time before sanding and top coating.

**Tip size:** 1.8

**Air pressure:** 35 lbs

### Step 3: Polyurethane Finish

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TO9/series	Polyurethane Finish	100	128
TX1550*	Hardener	50	64
TZ13NH**	Thinner	10-30	10-30

\* Use TX75 for non-yellowing

40

50

\*\*Use TZ4223 or TZ425 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 3-4 hours

**Dry to handle:** 30-40 minutes

**Application:** After 8 hours sand sealer with 320 sand paper. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish.

**Tip size:** 1.8

**Air pressure:** 35 lbs

## Acrylic/Polyurethane Open-Pore System

Note: This system is a "water white" system with maximum yellowing resistance. It is recommended for all light colored woods, i.e. ash, maple, birch.

### Step 1: Acrylic/Polyurethane Sealer

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TA0012	Acrylic/Urethane VOC/CSealer	100	128
TX1939	Hardener	20	26
TZ33NH or TZ13	Thinner	0 - 20	0 -20

**Pot life:** 5 hours

**Dry to handle:** 15 - 30 minutes

**Application:** Spray one coat (cross- hatch), allow to dry 8 hours (at ambient temperature) before sanding. Additional coats maybe applied wet-on-wet within 1 to 3 hours of previous coats without sanding.

**Dry to Topcoat:** 8 hours

**Tip size:** 1.8    **Air pressure:** 35 lbs

### Step 2: Acrylic/Polyurethane Finish (gloss)

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TP11	Acrylic/Polyurethane Finish	100	128
TX1939	Hardener	20	26
TZ13NH or TZ4223	Thinner*	25 - 50	20 - 30

\* Use 30 - 50 parts for open pore.

**Pot life:** 6 hours

**Dry to handle:** 1 hour

**Application:** First sand the sealer with 320, then 400 sand paper. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish. Additional coats may be applied wet-on-wet within 2-4 hours without sanding. For a harder finish use 5% additional TX1939 hardener. *Note:* this finish may be buffed if desired, but 2 or 3 coats may be necessary to avoid rubbing through to undercoat. Wait at least 48-72 hours to buff.

**Tip size:** 1.8    **Air pressure:** 35 lbs

### Step 2a: Acrylic/Polyurethane Finish (matte)

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TS000/series	Acrylic/Polyurethane Finish	100	128
TX1939	Hardener	20	26
TZ13NH or TZ4223	Thinner*	20	30

\* Use 30 - 50 parts for open pore.

**Pot life:** 6 hours

**Dry to handle:** 15 - 30 minutes

**Application:** First sand the sealer with 320 sand paper. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish. Additional coats may be applied wet-on-wet within 1-3 hours without sanding.

**Tip size:** 1.8    **Air pressure:** 35 lbs



## Acrylic Urethane Velvet Diamond Finish

**Step 1:** PF 5/series Stains for Color

**Step 2:** *Acrylic/Urethane Sealer*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TA44	Polyurethane sealer	100	128
TX11*	Hardener	50	64
TZ33**	Thinner	0-15	0-30

\*Use TX19 in hot, humid weather to avoid pinholes and bubbles. Use TX1511 for HAPS-Compliance

\*\*TZ13 may be needed in hot weather to slow dry. Use "NH" solvent version for HAPS-Compliance

**Pot life:** 3-4 hours

**Dry to handle:** 30-40 minutes

**Application:** Spray on a coat of sealer. If additional coats of sealer are required they can be applied one hour after previous coat without sanding. If it is not applied within three hours, you must wait eight hours, sand the sealer with 320 paper, blow the residue from the panel, then apply the next coat of sealer. Allow 8 hours cure time before sanding and top coating.

**Tip size:** 1.8

**Air pressure:** 35 lbs

**Step 3:** *Acrylic/Urethane Velvet Diamond Finish*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TS168	Acrylic Urethane Clear	100	128
TX168	Hardener	30	30
TZ4223 or 13NH or TZ35	Thinner	25	30

**Pot life:** 6 hours

**Dry to handle:** 15-30 minutes

**Application:** First sand the sealer 320 sand paper. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish. Additional coats may be applied wet-on-wet within 1-3 hours without sanding.

**Tip size:** 1.8

**Air pressure:** 35 lbs

## Clear Polyurethane Table Top System

### Step 1: Barrier coat

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TF25	Polyurethane Barrier Coat	100	128
TV19	Accelerator	5	8
TZ35	Thinner	25	32

Pot life: 3-4 hours

Dry to handle: 20 minutes

Application: A thin wash coat must be applied, allowed to dry for at least 2 hours, and then apply the polyester undercoat. If undercoat is not applied within 4 hours, the barrier coat must be allowed to cure 8 hours, then sanded to insure adhesion.

Tip size: 1.8

Air pressure: 35 lbs

### Step 2: Polyester Undercoat

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TG1323	Clear polyester undercoat	100	128
TV72*	Accelerator	2	2
TZ03	Thinner	10	15-30

Note: Mix extremely well before adding catalyst

TV84 Catalyst 2 2

\* Use 1 part TV72 in hot weather, it slows the cure, but always use 2 parts TV84.

Pot life: 30 - 60 minutes

Dry to handle: 1.5 - 2 hours

Application: Spray one very heavy coat (cross-hatch), let the undercoat dry for one hour and then spray an additional heavy coat (cross-hatch). If more than three hours dry, wait 12 hours and sand before recoating. Allow this wet-on-wet stage to dry 12 hours (at ambient temperature) before sanding. Note: Never mix the accelerator and catalyst together. Dry to recoat: 12 hours

Tip size: 2.5

Air pressure: 35 lbs

### Step 3: Polyurethane Finish

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
T0975/series	Polyurethane Finish	100	128
TX70	Hardener	50	64
TZ425 or TZ4223	Thinner Blend	10-30	10-30

Pot life: 3-4 hours

Dry to handle: 30-40 minutes

Application: After 12 hours sand sealer with 320 sand paper. Blow the residue from the panel and then spray a normal 3-5 mil wet coat. Additional coats are not recommended after 3 hours. If necessary spray the additional coat wet on wet in the time window of 1 to 3 hours after the original coat. If recoating is necessary after 3 hours, sand extremely well with 320 paper first.

Tip size: 1.8 Air pressure: 35 lbs

## Clear Polyurethane - Wet Look System

### Step 1: Pf 5/series Stains for Color

#### Step 2: Barrier coat

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TF25	Polyurethane Barrier Coat	100	128
TV19	Accelerator	5	8
TZ35	Thinner	25	32

**Pot life:** 3-4 hours

**Dry to handle:** 20 minutes

**Application:** A thin wash coat must be applied, allowed to dry for at least 2 hours, and then apply the polyester undercoat. If undercoat is not applied within 4 hours, the barrier coat must be allowed to cure 8 hours, then sanded to insure adhesion.

**Tip size:** 1.8 **Air pressure:** 35 lbs

#### Step 3: Polyester Undercoat

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TG1323	Clear polyester undercoat	100	128
TV72*	Accelerator	2	2
TZ03	Thinner	10	15-30

Note: Mix extremely well before adding catalyst

TV84 Catalyst 2 2

\* Use 1 part TV72 in hot weather, it slows the cure, but always use 2 parts TV84.

**Pot life:** 30 - 60 minutes

**Dry to handle:** 1.5 - 2 hours

**Application:** Spray one very heavy coat (cross-hatch), let the undercoat dry for one hour and then spray an additional heavy coat (cross-hatch). If more than three hours dry, wait 12 hours and sand before recoating. Allow this wet-on-wet stage to dry 12 hours (at ambient temperature) before sanding. Note: Never mix the accelerator and catalyst together.

**Dry to recoat:** 12 hours

**Tip size:** 2.5 **Air pressure:** 35 lbs

#### Step 4: Polyurethane Finish

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TP60	Clear polyurethane finish	100	128
TX75	Hardener	100	128
TZ13**	Thinner	40	40

\*\*Use TZ13/TZ35 blend at 30/10 in cooler weather for faster dry. Use TZ4223 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 2 hours

**Dry to handle:** 2 hours

**Buffing:** 24 hours

**Topcoating with itself without sanding:** 30 minutes minimum - 3 hours maximum

**Application:** First sand the sealer with a series of sand papers - 320 then 400. Spray one coat. This finish may be buffed if desired, but two coats may be necessary to avoid rubbing through to undercoat. Wait at least 48-72 hours to buff

**Tip size:** 1.8 **Air pressure:** 35 lbs

## Clear Polyester - Gloss Wet Look System

### Step 1: *Barrier coat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TF1525	Lo-Haps Barrier Coat	100	128
TV19	Accelerator	5	8
TZ35NH	Thinner	25	32

**Pot life:** 3-4 hours

**Dry to handle:** 20 minutes

**Application:** A thin wash coat must be applied, allowed to dry for at least 2 hours, and then apply the polyester undercoat. If undercoat is not applied within 4 hours, the barrier coat must be allowed to cure 8 hours, then sanded to insure adhesion.

**Tip size:** 1.8

**Air pressure:** 35 lbs

### Step 2: *Polyester Undercoat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TG1323	Clear polyester undercoat	100	128
TV72*	Accelerator	2	2
TZ03	Thinner	10	15-30
Note: Mix extremely well before adding catalyst			
TV84	Catalyst	2	2

\* Use 1 part TV72 in hot weather, it slows the cure, but always use 2 parts TV84.

**Pot life:** 30 - 60 minutes

**Dry to handle:** 1.5 - 2 hours

**Application:** Spray one very heavy coat (cross-hatch), let the undercoat dry for one hour and then spray an additional heavy coat (cross-hatch). If more than three hours dry, wait 12 hours and sand before recoating. Allow this wet-on-wet stage to dry 12 hours (at ambient temperature) before sanding. Note: Never mix the accelerator and catalyst together.

**Dry to recoat:** 12 hours

**Tip size:** 2.5

**Air pressure:** 35 lbs

### Step 3: *Polyester Clear Gloss Finish Coat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TR9982	Clear Polyester Finish	100	128
TV72	Accelerator	2	2
TZ86	Thinner	20	32
Note: Mix extremely well before adding catalyst			
TV84	Catalyst	2	2

**Pot life:** 30 - 60 minutes

**Dry to handle:** 1 - 2 hours

**Application:** First sand the sealer with a series of sand papers - 320 then 400. Spray one coat (cross-hatch). This finish may be buffed if desired, but 2 coats may be necessary to avoid rubbing through to undercoat. Note: Never mix the accelerator and catalyst together. Wait at least 48-72 hours to buff.

**Tip size:** 1.8

**Air pressure:** 35 lbs

## Clear Polyester - Gloss Wet Look System

**Step 1:** *PF 5/series Stains for Color*

**Step 2:** *Barrier Coat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TF25	Polyurethane Barrier Coat	100	128
TV19	Hardener	10	13
TZ50	Thinner	50	64

**Pot life:** 2 hours    **Dry to handle:** 20 minutes

**Application:** A thin wash coat must be applied, allowed to dry for at least 35 minutes, and then apply the polyester undercoat. If undercoat is not applied within 90 minutes, the barrier coat must be allowed to cure 4 hours, then sanded to insure adhesion.

**Tip size:** 1.8    **Air pressure:** 35 lbs

**Step 3:** *Polyester Undercoat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TG1323	Clear polyester undercoat	100	128
TV72	Accelerator	2	2
TZ03	Thinner	10	15-30
Note: Mix extremely well before adding catalyst			
TV84	Catalyst	2	2

**Pot life:** 30 - 60 minutes

**Application:** Spray one very heavy coat (cross-hatch), let the undercoat dry for one hour and then spray an additional heavy coat (cross-hatch). If more than three hours dry, wait 12 hours and sand before recoating. Allow this wet-on-wet stage to dry 12 hours (at ambient temperature) before sanding. Note: Never mix the accelerator and catalyst together.

**Tip size:** 2.5    **Air pressure:** 35 lbs.

**Step 4:** *Polyester Clear Gloss Finish Coat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TR1688	Clear Polyester Finish	100	128
TV72	Accelerator	2	2
TZ86	Thinner	10	12-16
Note: Mix extremely well before adding catalyst			
TV84	Catalyst	2	2

**Pot life:** 30 - 60 minutes

**Dry to handle:** 1 - 2 hours

**Application:** First sand the sealer with a series of sand papers - 320 then 400. Spray one coat (cross-hatch). This finish may be buffed if desired, but 2 coats may be necessary to avoid rubbing through to undercoat. Note: Never mix the accelerator and catalyst together. Wait at least 48-72 hours to buff.

**Tip size:** 1.8    **Air pressure:** 35 lbs

## Pigmented Polyurethane Open Pore Finish

### Step 1: Polyurethane Sealer

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PA20	White polyurethane primer	100	128
TX50*	Hardener	50	84
TZ33	Thinner	10	20
*Use TX24 for slightly better elasticity, at same level as TX50			
* Use TX75 for non-yellowing,		40	64

**Pot life:** 3 hours

**Dry to handle:** 30-40 minutes

**Recoat:** 12 hour minimum

**Application:** Spray on a coat of primer. If a second coat of primer is required it can be applied after 30- 60 minutes without sanding. If it is not applied within three hours, you must wait 12 hours, sand the primer with 320 paper, blow the residue from the panel, then apply the second coat of primer. Allow 12 hours cure time before sanding and top coating.

**Tip size:** 1.8    **Air pressure:** 35 lbs

### Step 2: Polyurethane Series Gloss White (or tinted to color)

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PM10	Gloss Polyurethanes	100	128
TX75	Hardener	80	128
TZ13**	Thinner	50	25-50

\*\*Use TZ4223 or TZ425 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 3-4 hours

**Dry to handle:** 1 hour

**Dry to Stack:** Over night

**Application:** First sand the primer with a series of sand papers - 320 then 400. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish. A second finish coat may be necessary to avoid rubbing through to primer. Apply second finish coat in 1- 3 hours without sanding. Wait at least 48 hours to buff.

**Tip size:** 1.8    **Air pressure:** 35 lbs

### Step 2a: Polyurethane Series Matte White (or tinted to color)

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PL800 Series	Matt or S/G Polyurethanes	100	128
TX75	Hardener	40	64
TZ13**	Thinner	15-30	30

\*\*Use TZ4223 or TZ425 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 3-4 hours

**Dry to handle:** 1 hour

**Dry to Stack:** Over night

**Application:** First sand the primer with 320 sandpaper. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish.

**Tip size:** 1.8    **Air pressure:** 35 lbs

## Matte White Ultra Non-yellowing System

### Step 1: Polyurethane Sealer

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PA70	White polyurethane primer	100	128
TX19	Hardener	40	64
TZ33	Thinner	10 - 20	10 - 20

**Pot life:** 4 hours

**Dry to handle:** 30-40 minutes

**Recoat:** 12 hour minimum

**Application:** Spray on a coat of primer. If additional coats of primer are required they can be applied 60 minutes from previous coat without sanding. If not applied within four hours, you must wait 12 hours, sand the primer with 320 paper, blow the residue from the panel, then apply the next coat of primer. Allow 12 hours cure time before sanding and top coating.

**Tip size:** 1.8

**Air pressure:** 35 lbs

### Step 2: White Acrylic Urethane

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PL80	White Acrylic Urethane	100	128
TX90	Hardener	25	40
TZ13**	Thinner	50	90

\*\* Use TZ425 or TZ4223 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 3 hours

**Dry to handle:** 1 hour

**Dry to stack:** Over night

**Application:** First sand the primer with 320 sand paper. Blow the residue from the panel and spray a coat (cross-hatch) of the finish.

**Tip size:** 1.8

## Open and Closed Pore Gloss White Ultra Non-yellowing System

### Step 1: Polyurethane Sealer

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PA20	White polyurethane primer	100	128
TX50*	Hardener	50	84
TZ33	Thinner	10 - 20	10 - 20
*Use TX24 for slightly better elasticity, at same level as TX50			
* Use TX75 for non-yellowing,		40	64

**Pot life:** 3 hours

**Dry to handle:** 30-40 minutes

**Recoat:** 12 hour minimum

**Application:** Spray on a coat of primer. If a second coat of primer is required it can be applied after 30-60 minutes without sanding. If it is not applied within three hours, you must wait 12 hours, sand the primer with 320 paper, blow the residue from the panel, then apply the second coat of primer. Allow 12 hours cure time before sanding and top coating.

**Tip size:** 1.8

**Air pressure:** 35 lbs

### Step 2: White Acrylic Finish High Gloss

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PM80	Gloss white acrylic urethane	100	128
TX90	Hardener	50	84
TZ13**	Thinner	30	64

\*\* Use TZ425 or TZ4223 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 3 hours

**Dry to handle:** 1 hour

**Application:** First sand the primer with a series of sand papers - 320 then 400. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish. A second finish coat may be necessary to avoid rubbing through to primer. Apply second finish coat in 3- 5 hours without sanding. Wait at least 48 - 72 hours to buff.

**Tip size:** 1.8

**Air pressure:** 35 lbs



## White Polyester Closed-Pore System (matte)

### Step 1: *Barrier coat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TF25	Polyurethane Barrier Coat	100	128
TV19	Accelerator	5	8
TZ35	Thinner	25	32

**Pot life:** 3-4 hours

**Dry to handle:** 20 minutes

**Application:** A thin wash coat must be applied, allowed to dry for at least 2 hour, and then apply the polyester undercoat. If undercoat is not applied within 4 hours, the barrier coat must be allowed to cure 8 hours, then sanded to insure adhesion.

**Tip size:** 1.8

**Air pressure:** 35 lbs

### Step 2: *Polyester Undercoat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PI40	White polyester undercoat	100	128
TV72*	Accelerator	2	2
TZ03	Thinner	10	32

Note: Mix extremely well before adding catalyst

TV80 or TV84	Catalyst	2	2
--------------	----------	---	---

\* Use 1 part TV72 in hot weather, it slows the cure, but always use 2 parts TV80 or TV84

**Pot life:** 30 minutes when using TV80, 90 minutes when using TV84

**Dry to handle:** 1.5 - 2 hour

**Application:** Spray one very heavy coat (cross-hatch), let the undercoat dry for one hour and then spray an additional heavy coat (cross-hatch). If more than three hours dry, wait 12 hours and sand before recoating. Allow this wet-on-wet stage to dry 12 hours (at ambient temperature) before sanding.

**Note:** Never mix the accelerator and catalyst together.

**Dry to sand and recoat:** minimum 12 hours

**Tip size:** 2.5

**Air pressure:** 35 lbs

### Step 3: *Polyurethane Matte Finish*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PL50	White Polyurethane	100	128
TX75	Hardener	40	64
TZ13**	Thinner	30	30

\*\* Use TZ425 or TZ4223 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 3-4 hours

**Dry to handle:** 1 hour

**Application:** First sand the sealer with 320 sand paper. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish.

**Tip size:** 1.8

**Air pressure:** 35 lbs

## White Polyester Closed-Pore System (high gloss)

### Step 1: Barrier coat

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TF25	Polyurethane Barrier Coat	100	128
TV19	Accelerator	5	8
TZ35	Thinner	25	32

**Pot life:** 3-4 hours

**Dry to handle:** 20 minutes

**Application:** A thin wash coat must be applied, allowed to dry for at least 2 hours, and then apply the polyester undercoat. If undercoat is not applied within 4 hours, the barrier coat must be allowed to cure 8 hours, then sanded to insure adhesion.

**Tip size:** 1.8

**Air pressure:** 35 lbs

### Step 2: Polyester Undercoat

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PI40	White polyester undercoat	100	128
TV72*	Accelerator	2	2
TZ03	Thinner	10	32

Note: Mix extremely well before adding catalyst

TV80 or TV84      Catalyst      2      2

\* Use 1 part TV72 in hot weather, it slows the cure, but always use 2 parts TV80 or TV84

**Pot life:** 30 minutes when using TV80, 90 minutes when using TV84

**Dry to handle:** 1.5 - 2 hours

**Application:** Spray one very heavy coat (cross-hatch), let the undercoat dry for one hour and then spray an additional heavy coat (cross-hatch). If more than three hours dry, wait 12 hours and sand before recoating. Allow this wet-on-wet stage to dry 12 hours (at ambient temperature) before sanding. Never mix the accelerator and catalyst together.

**Dry to recoat:** 12 hours

**Tip size:** 2.5

**Air pressure:** 35 lbs

### Step 3: Polyurethane Gloss Finish

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PM10	White Polyurethane	100	128
TX75*	Hardener	80	128
TZ13**	Thinner	50	25-50

\* TX75 is non-yellowing

\*\* Use TZ425 or TZ4223 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 3-4 hours

**Dry to handle:** 1 hour

**Application:** First sand the sealer with a series of sand papers - 320 then 400. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish. A second finish coat may be necessary to avoid rubbing through to undercoat. Apply second finish coat in 1- 3 hours without sanding. Wait at least 48-72 hours to buff.

**Tip size:** 1.8

**Air pressure:** 35 lbs

## Closed Pore Ultra Non-yellowing Matte White MDF Application

### Step 1: *Barrier coat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TF25	Polyurethane Barrier Coat	100	128
TV19	Accelerator	5	8
TZ35	Thinner	25	32

**Pot life:** 3-4 hours

**Dry to handle:** 20 minutes

**Application:** A thin wash coat must be applied, allowed to dry for at least 2 hour, and then apply the polyester undercoat. If undercoat is not applied within 4 hours, the barrier coat must be allowed to cure 8 hours, then sanded to insure adhesion.

**Tip size:** 1.8

**Air pressure:** 35 lbs

### Step 2: *Polyester Undercoat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PI40	White polyester undercoat	100	128
TV72*	Accelerator	2	2
TZ03	Thinner	10	32

Note: Mix extremely well before adding catalyst

TV80 or TV84	Catalyst	2	2
--------------	----------	---	---

\* Use 1 part TV72 in hot weather, it slows the cure, but always use 2 parts TV80 or TV84

**Pot life:** 30 minutes when using TV80, 90 minutes when using TV84

**Dry to handle:** 1.5 - 2 hours

**Application:** Spray one very heavy coat (cross-hatch), let the undercoat dry for one hour and then spray an additional heavy coat (cross-hatch). If more than three hours dry, wait 12 hours and sand before recoating. Allow this wet-on-wet stage to dry 12 hours (at ambient temperature) before sanding.

**Note:** Never mix the accelerator and catalyst.

**Dry to sand and recoat:** minimum 12 hours

**Tip size:** 2.5

**Air pressure:** 35 lbs

### Step 3: *White Acrylic Urethane*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PL80	White Acrylic Urethane	100	128
TX90	Hardener	25	40
TZ13**	Thinner	50	90

\*\* Use TZ425 or TZ4223 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 3 hours

**Dry to handle:** 1 hour

**Dry to stack:** Over night

**Application:** First sand the sealer with 320 sand paper. Blow the residue from the panel and spray a coat (cross-hatch) of the finish.

**Tip size:** 1.8

**Air pressure:** 35 lbs

## Closed Pore Ultra Non-yellowing Gloss White System MDF Applications

### Step 1: *Barrier coat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TF25	Polyurethane Barrier Coat	100	128
TV19	Accelerator	5	8
TZ35	Thinner	25	32

**Pot life:** 3-4 hours

**Dry to handle:** 20 minutes

**Application:** A thin wash coat must be applied, allowed to dry for at least 2 hours, and then apply the polyester undercoat. If undercoat is not applied within 4 hours, the barrier coat must be allowed to cure 8 hours, then sanded to insure adhesion.

**Tip size:** 1.8    **Air pressure:** 35 lbs

### Step 2: *Polyester Undercoat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PI40	White polyester undercoat	100	128
TV72*	Accelerator	2	2
TZ03	Thinner	10	32

Note: Mix extremely well before adding catalyst

TV80 or TV84    Catalyst    2    2

\* Use 1 part TV72 in hot weather, it slows the cure, but always use 2 parts TV80 or TV84

**Pot life:** 30 minutes when using TV80, 90 minutes when using TV84

**Dry to handle:** 1.5 - 2 hours

**Application:** Spray one very heavy coat (cross-hatch), let the undercoat dry for one hour and then spray an additional heavy coat (cross-hatch). If more than three hours dry, wait 12 hours and sand before recoating. Allow this wet-on-wet stage to dry 12 hours (at ambient temperature) before sanding.

**Note:** Never mix the accelerator and catalyst.

**Dry to sand and recoat:** minimum 12 hours

**Tip size:** 2.5    **Air pressure:** 35 lbs

### Step 3: *White Acrylic Finish High Gloss*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PM80	Gloss white acrylic urethane	100	128
TX90	Hardener	50	84
TZ13**	Thinner	30	64

\*\* Use TZ425 or TZ4223 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 3 hours

**Dry to handle:** 1 hour

**Application:** First sand the sealer with a series of sand papers - 320 then 400. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish. A second finish coat may be necessary to avoid rubbing through to undercoat. Apply second finish coat in 3- 5 hours without sanding. Wait at least 48 - 72 hours to buff.

**Tip size:** 1.8    **Air pressure:** 35 lbs

## Black Polyester Closed Pore Matte System

### Step 1: Barrier coat

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TF25	Polyurethane Barrier Coat	100	128
TV19	Accelerator	5	8
TZ35	Thinner	25	32

**Pot life:** 3-4 hours

**Dry to handle:** 20 minutes

**Application:** A thin wash coat must be applied, allowed to dry for at least 2 hour, and then apply the polyester undercoat. If undercoat is not applied within 4 hours, the barrier coat must be allowed to cure 8 hours, then sanded to insure adhesion.

**Tip size:** 1.8

**Air pressure:** 35 lbs

### Step 2: Polyester Undercoat

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PI29	Black polyester undercoat	100	128
TV72*	Accelerator	2	2
TZ03	Thinner	10	20

Note: Mix extremely well before adding catalyst

TV84	Catalyst	2	2
------	----------	---	---

\* Use 1 part TV72 in hot weather, it slows the cure, but always use 2 parts TV84

**Pot life:** 30 - 60 minutes

**Dry to handle:** 1.5 - 2 hours

**Application:** Spray one very heavy coat (cross-hatch), let the undercoat dry for one hour and then spray an additional heavy coat (cross-hatch). If more than three hours dry, wait 12 hours and sand before recoating. Allow this wet-on-wet stage to dry 12 hours (at ambient temperature) before sanding. Never mix the accelerator and catalyst together.

**Dry to recoat:** 12 hours

**Tip size:** 2.5

**Air pressure:** 35 lbs

### Step 3: Polyurethane Matte Black Finish

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PL59	Black Polyurethane	100	128
TX50	Hardener	50	64
TZ13**	Thinner	25	32

\*\* Use TZ425 or TZ4223 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 3 hours

**Dry to handle:** 1 hour

**Application:** First sand the sealer with 320 sand paper. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish.

**Tip size:** 1.8

**Air pressure:** 35 lbs

## Black Polyester Closed-Pore System (high gloss)

### Step 1: *Barrier coat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TF25	Polyurethane Barrier Coat	100	128
TV19	Accelerator	5	8
TZ35	Thinner	25	32

**Pot life:** 3-4 hours

**Dry to handle:** 20 minutes

**Application:** A thin wash coat must be applied, allowed to dry for at least 2 hours, and then apply the polyester undercoat. If undercoat is not applied within 4 hours, the barrier coat must be allowed to cure 8 hours, then sanded to insure adhesion.

**Tip size:** 1.8

**Air pressure:** 35 lbs

### Step 2: *Polyester Undercoat*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PI29	Black polyester undercoat	100	128
TV72*	Accelerator	2	2
TZ03	Thinner	10	20

Note: Mix extremely well before adding catalyst

TV84	Catalyst	2	2
------	----------	---	---

\* Use 1 part TV72 in hot weather, it slows the cure, but always use 2 parts TV84

**Pot life:** 30 - 60 minutes

**Dry to handle:** 1.5 - 2 hours

**Application:** Spray one very heavy coat (cross-hatch), let the undercoat dry for one hour and then spray an additional heavy coat (cross-hatch). If more than three hours dry, wait 12 hours and sand before recoating. Allow this wet-on-wet stage to dry 12 hours (at ambient temperature) before sanding. Never mix the accelerator and catalyst together.

**Dry to recoat:** 12 hours

**Tip size:** 2.5

**Air pressure:** 35 lbs

### Step 3: *Polyurethane Gloss Finish*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PM19	Black Polyurethane	100	128
TX51	Hardener	100	128
TZ13**	Thinner	50	25-50

\*\* Use TZ4223 or TZ425 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 3-4 hours

**Dry to handle:** 1 hour

**Application:** First sand the sealer with a series of sand papers - 320 then 400. Blow the residue from the panel and then spray a coat (cross-hatch) of the finish. A second finish coat may be necessary to avoid rubbing through to undercoat. Apply second finish coat in 1- 3 hours without sanding. Wait at least 48-72 hours to buff.

**Tip size:** 1.8

**Air pressure:** 35 lbs

## Bar Tops and Table Tops

**Step 1:** *PF 5/series Stains for color*

**Step 2:** *Barrier coat (Exotic Oily Dark Woods)*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TF25	Polyurethane Barrier Coat	100	128
TV19	Accelerator	5	8
TZ35	Thinner	25	32

**Pot life:** 3-4 hours

**Dry to handle:** 20 minutes

**Application:** A thin wash coat must be applied, allowed to dry for at least 2 hours, and then apply the polyester undercoat. If undercoat is not applied within 4 hours, the barrier coat must be allowed to cure 8 hours, then sanded to insure adhesion.

**Tip size:** 1.8

**Air pressure:** 35 lbs

**Step 3:** *Clear Polyester to be Buffed. Gives excellent build, high gloss wet look on horizontal surfaces. It must not be used on vertical positions. For vertical application use only TC-11. Two coats of TC-12 will give build sufficient to completely encase a coin the size of a quarter.*

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TC11	Clear Polyester	100	128
TV72*	Accelerator	2	3
TZ80	Thinner - Styrene	10	15
TV80	Catalyst	2	2

\* Use 1 part TV72 in hot weather, it slows the cure, but always use 2 parts TV80

**Pot life:** 30 minutes

**Dry to handle:** 1 hour

**Application:** Spray 2 very heavy coats (cross-hatch) up to 12 mils wet. Allow the polyester to set up for 30 - 60 minutes between all additional coats. The polyester must cure 24 hours minimum before sanding and buffing. Sand with a series of sand papers, 180, 220, 320, 600 and buff.

**NOTE:** Pigmented systems, ILVA PZ 6/series colorant pastes are available.

## Pearlescent Acrylic Urethane Finish

### Step 1: Polyester Undercoat

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PI40	White polyester undercoat	100	128
TV72*	Accelerator	2	2
TZ03	Thinner	10	32

Note: Mix extremely well before adding catalyst

TV80 or TV84	Catalyst	2	2
--------------	----------	---	---

\* Use 1 part TV72 in hot weather, it slows the cure, but always use 2 parts TV80 or TV84

**Pot life:** 30 minutes when using TV80, 3-4 hours when using TV84

**Dry to handle:** 1.5 - 2 hour

**Application:** Spray one very heavy coat (cross-hatch), let the undercoat dry for one hour and then spray an additional heavy coat (cross-hatch). If more than three hours dry, wait 12 hours and sand before recoating. Allow this wet-on-wet stage to dry 12 hours (at ambient temperature) before sanding.

**Note:** Never mix the accelerator and catalyst together.

**Dry to sand and recoat:** minimum 12 hours

**Tip size:** 2.5    **Air pressure:** 35 lbs

### Step 2: Polyurethane Color Coat (PL50 White used as example)

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PL50	White Polyurethane	100	128
TX75	Hardener	40	64
TZ13**	Thinner	30	30

\*\*Use TZ425 or TZ4223 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 3-4 hours

**Dry to handle:** 1 hour

**Application:** First sand the undercoat with 320, then 400 sand paper. Blow the residue from the panel and then spray a coat (cross-hatch) of the color coat.

**Tip size:** 1.8    **Air pressure:** 35 lbs

### Step 3: Pearlescent Acrylic Urethane Finish

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
PU1252	Pearlescent Acrylic Urethane Finish	100	128
TX90	Curing Agent	20	26
TZ4223	Thinner	20-30	20-30

**Pot life:** 4 hours

**Dry to handle:** 2 hours

**Application:** Allow Polyurethane color coat to dry 1 hour and spray a generous coat (cross hatch) of the Pearlescent Acrylic Urethane.

**Tip size:** 1.8    **Air pressure:** 35 lbs

### Step 4: Acrylic/Polyurethane Finish (gloss)

<u>Product #</u>	<u>Component Description</u>	<u>Parts/Wt</u>	<u>Parts/Vol</u>
TP11	Acrylic/Polyurethane Finish	100	128
TX90	Hardener	20	26
TZ13**	Thinner	25-50	20-30

\*\* Use TZ425 or TZ4223 in hot humid weather to avoid pinholes and bubbles.

**Pot life:** 7 hours

**Dry to handle:** 1 hour

**Application:** Allow Pearlescent Acrylic Urethane to dry 3 - 4 hours and spray a coat (cross hatch) of the finish. This finish may be buffed if desired. Additional coats may be needed to avoid rubbing through to pearlescent. These coats should be applied wet-on-wet with 2-4 hours between coats. For a harder finish use 5% additional TX90 hardener. Wait at least 48-72 hours to buff.

**Tip size:** 1.8    **Air pressure:** 35 lbs



## ILVA TX - POLYURETHANE HARDENERS

CODE	USE & DSCRIPTION	PROPERTIES	REACTIVITY
TX11	PU Ssalers (TA03, TA44, TA48)	Good fill, HAPS Compliant	Medium
TX19	PU Sealers (TA03, TA44, TA48, PA20, PA70)	Good fill, Very elastic	Medium Slow
TX24	PU Clear Sealers & Topcoats	General use, Yellows, Dark Woods, More elastic than TX50	Medium Fast
TX50	PU Clear Sealers & Topcoats	General Use, Yellows, Dark Woods, HAPS Compliant	Fast
TX51	PU Gloss Topcoats	Yellows, Harder than TX24 and TX50. Good for PM19 Gloss Black	Fast
TX70	PU Clear (T0 9/SERIES, T0975/SERIES)	Less yellowing & harder than TX24 and TX50	Medium Fast
TX72	PU Clear and Pigmented Topcoats	Less yellowing & harder than TX24 and TX50	Fast
TX75	PU Clear and Pigmented Topcoats	Max. Non-yellowing, Color brightness, Hardness, Flexible	Medium
TX76 - TX276	PU Clear and Pigmented Topcoats	Max. Non-yellowing, Color brightness, Hardness, Flexible, higher conc.vs.TX75, HAPS compliant	Medium
TX90	All Acrylic Urethane	Max. Non-Yellowing, Very flexible	Slow
TX92	All Acrylic Urethane	Max. Non-Yellowing, Very flexible	Medium Slow
TX95	Solvent UV roller sealers	For improved wetting properties on some difficult wooden substrates	-
TX97	Solvent UV roller sealers	For improved wetting properties on some difficult wooden substrates	-
TX1939	All Acrylic Urethane	Max. Non-Yellowing, Very flexible, HAPS Compliant	Slow
TX168	All Acrylic Urethane	Max. Non-Yellowing, Very flexible, HAPS Compliant, HighSolids; can be used to replace TX90 or TX1939 at 1/2 the level of hardener	Slow

# ICS-ILVA THINNERS

CODE	DESCRIPTION & USE	SPEED OF DRY
TZ03	Polyester series PI, TG, TR	Very Fast
TZ08	Stain PF 5 series (Buytl Cellosolve) (use in addition to other solvents)	Retarder
TZ10	Polyurethane Retarder (use in addition to other solvents)	Very Slow
TZ13	Polyurethane Thinner	Middle Slow
TZ13NH	Polyurethane Thinner No Haps	Middle Slow
TZ14	Polyurethane Thinner	Very Slow
TZ14NH	Polyurethane Thinner No Haps	Very Slow
TZ1836	PF 5 Stain Series Reducer for Spray	Middle
TZ33	Polyurethane Thinner, Best for Sealers	Middle Fast
TZ33NH	Polyurethane Thinner No Haps, Best for Sealers	Middle Fast
TZ35	Polyurethane Thinner	Middle Fast
TZ35NH	Polyurethane Thinner, No Haps	Middle Fast
TZ50	Polyurethane Thinner, Polyester Thinner	Fast
TZ80	Polyester TC series Reactive Styrene	Middle Slow
TZ86	Polyester TR/series	Middle Fast
TZ90	Mineral Spirits	Middle Slow
TZ418	Polyurethane Retarder (use in addition to other solvents)	Very Slow
LT4040	Lacquer Thinner	Middle
LT1010	Blush Retardign Lacquer Thinner	Slow
TZ4223	Polyurethane (Summer) and/or High Humidity	Slow
TZ425	Polyurethane (Summer) and/or High Humidity	Very Slow
TZ1042	N-Butyl Acetate Polyurethane Thinner	Middle Slow
TZS006	Polyurethane Thinner Low VOC	Middle Fast
TZS007	Ultra Polyurethane Thinner Low VOC	Middle Slow
TZS008	Slow Polyurethane Thinner Low VOC	Slow

Generally speaking the use of slower solvents or NoHaps solvents increases the gloss levels slightly

# **ILVA**

## **TECHNICAL DATA SHEETS**

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

# ILVA TECHNICAL DATA SHEET

**PRODUCT SERIES:** ILVANOL

**PRODUCT CODE:** PA 20

**DESCRIPTION:** Polyurethane undercoat, white

**USES:** Undercoat for polyurethane pigmented systems, suitable for furnitures in general.  
Recommended for topcoating with gloss finishes.

<b>PRODUCT PREPARATION:</b>		<u>Parts by weight</u>	<u>Parts by volume</u>
PA 20	Polyurethane undercoat, white	100	128
TX 50*	Hardener	50	84
TZ 33	Thinner	10 - 20	20
	*Use TX24 for better filling properties and elasticity at same level as TX50		
	**Use TX75 for non-yellowing	40	64

**APPLICATION SYSTEM:** Spray and curtain coater

**QUANTITY(grsq mt):** 120 - 140 per coat (4.8-5.6 wet mils)

**COATS:** One or more

<b>GENERAL PROPERTIES:</b>		
Specific Gravity, gr/cc		1.25 +/- 0.05
Viscosity*		30 +/- 2 sec
Application Viscosity**		15 +/- 2 sec
Solids by Weight, %, as supplied		61 +/- 2
Solids by Weight, %, ready to use		50 +/- 2
Pot Life, hours at 20°C/68°F		3

\* ASTM D1200 (Ford) #6 at 20°C/68°F

\*\* ASTM D1200 (Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	Recoating with itself:	30 minutes minimum 3 hours maximum
	Sanding and topcoating:	24 hours minimum

**TYPICAL SYSTEMS:** Substrate MDF, various woods

**Gloss finish (white)**

TF25/TV19	1 coat	40 gr/sq.mt. (1.6 wet mils)
PA20/TX50	1 or 2 coats	120 gr/sq.mt. per coat (4.8 wet mils)
PM10/TX75	1 coat	150 gr/sq.mt. (6 wet mils)

**Matte finish (white)**

TF25/TV19	1 coat	40 gr/sq.mt. (1.6 wet mils)
PA20/TX50	1 or 2 coats	120 gr/sq.mt. per coat (4.8 wet mils)
PL50/TX75	1 coat	150 gr/sq.mt. (6 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97 Revised 12-13, 5-16, 10-17

**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:** ILVANOL

**PRODUCT CODE:** PA 39

**DESCRIPTION:** Black Polyurethane Undercoat

**USES:** Undercoat for polyurethane pigmented systems, suitable for chairs, mouldings, etc.

<b>PRODUCT PREPARATION:</b>		<u>Parts by weight</u>	<u>Parts by volume</u>
PA39 Polyurethane Undercoat		100	128
TX19 Hardener		40	66
TZ33 Thinner		10 - 20	15-25

**APPLICATION SYSTEM:** Spray and curtain coater

**QUANTITY(grsq mt):** 120 - 140 per coat (4.8 wet mils)

**COATS:** One or more

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.27 +/- 0.05
	Viscosity*	20 +/- 2 sec
	Application Viscosity**	15 +/- 2 sec
	Solids by Weight, %, as supplied	62-65
	Solids by Weight, %, ready to use	50 +/- 2
	Pot Life, hours at 20°C/68°F	3

\* ASTM D1200 (Ford) #8 at 20°C/68°F

\*\* ASTM D1200 (Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	Topcoating with itself	30 minutes minimum 3 hours maximum
	Sanding and topcoating	24 hours minimum

**TYPICAL SYSTEMS:** Substrate Various woods

**Chairs, matte**

PA39/TX19	1 - 2 coats	120 gr/sq.mt. per coat (4.8 wet mils)
PL59/TX50	1 coat	120 gr/sq.mt. (4.8 wet mils)

**Chairs, gloss**

PA39/TX19	2 coats	120 gr/sq.mt. per coat (4.8 wet mils)
PM19/TX51	1 coat	120 gr/sq.mt. (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97; Revised 12-13, 5-16, 10-17

**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:** ILVANOL

**PRODUCT CODE:** PA70

**DESCRIPTION:** POLYURETHANE UNDERCOAT, WHITE

**USES:** Flat panels and mouldings suitable even for polyurethane foam.

<b>PRODUCT PREPARATION:</b>	PA70	<u>Parts by weight</u>	<u>Parts by volume</u>
	TX19	100	128
	TZ33 Thinner	40	64
		10 - 20	10 - 30

**APPLICATION SYSTEM:** Spray, curtain coater

**QUANTITY(grams mt):** 120 - 140 per coat (4.8 - 5.6 wet mils)

**COATS:** One to four

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.395+/-0.05
	Viscosity*	36+/-2 sec.
	Appl.Viscosity**	15+/-2 sec.
	Solids by Weight, %, as supplied	68+/-2
	Solids by Weight, %, ready to use	56+/-2
	Pot Life, hours at 20°C/68°F	5 hours

\* DIN 53211 Nr.6 at 20°C/68°F

\*\* DIN 53211 Nr.4 at 20°C/68°F

**DRYING TIME:**  
(at 20°C/68°F)

1- 6 hours between coats  
24 hours before sanding

**TYPICAL SYSTEMS:**

SYSTEM NR 1

Substrate:	various woods
Sealer:	PA70 - three or four coats - 1 day drying-sanding-120 gr/sqmt/coat
Finish:	PL - white pigmented matt finish PM - white pigmented glossy finish

SYSTEM NR 2

Substrate:	MDF
Sealer:	PA70-three or four coats- 1 day drying-sanding-120 gr/sqmt per coat
Finish:	PL - white pigmented glossy finish

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97, Revised 12-13, 5-16, 10-17, 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

<b>PRODUCT CODE:</b>	<b>PD 3/93</b>	
<b>DESCRIPTION:</b>	<b>Vehicle for wipe stains and glazes</b>	
<b>USES:</b>	Use as a vehicle for glaze and stain. Cabinets and assembled furniture.	
<b>PRODUCT PREPARATION:</b>	Mix 1:1 with the basis color series PL5. Mix 60:40 with PZ3/colors and then add TZ08 to improve wiping. May be used with PF5/Series Universal Stains.	
<b>APPLICATION SYSTEM:</b>	Spray and wipe	
<b>QUANTITY(grsq mt):</b>	50 - 60 (2-2.4 wet mils)	
<b>COATS:</b>	One	
<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	0.92 +/- 0.2
	Solids by Weight, %, as supplied	13 +/- 1
	Viscosity*	13 - 15 sec
	* DIN53211 #4 at 20°C/68°F	
<b>DRYING TIME: (at 20°C/68°F)</b>	Handling:	16 - 24 hours
<b>TYPICAL SYSTEMS:</b>	Substrate	Various woods (walnut, ash, etc.)
	PD3/93/PL5series (24 hours drying)	
	TA series sealer	
	TO series finish	
<b>NOTES:</b>	We advise removal of excess stain so adhesion of the next coat will not be effected. The vehicle provides excellent workability to stain color bases.	
<b>SHELF LIFE:</b>	One year	
<b>STORAGE:</b>	Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.	
<b>DATE OF ISSUANCE:</b>	03 - 97 Revised 12-00, 5-16	

**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:** ILVATINT

**PRODUCT CODE:** PF 5/Series

**DESCRIPTION:** Universal stains

**USES:** Staining of furniture, frames, panels. Can be used by spray and roller, and diluted with solvent or water. Product should not be used without dilution.

**PRODUCT PREPARATION:** Spray application (solvent systems)

PF 5/series	Stain	10 parts by weight
TZ03 or TZ1836	Thinner	50-100 parts by weight
PD3/93	Vehicle	Add 10% - 40% to above mixture
PF91	Vehicle	Add 10% - 40% to above mixture

Spray application (water system)

PF 5/ series	Stain	10 parts by weight
Water		50-100 parts by weight
PF95	Vehicle	Add 10% - 40% to above mixture

Thinners available

TZ03	for spray application to picture frames
TZ35	for spray application to furniture
TZ1836	for spray application
TZ07	for spray and roller application
TZ08	can be added to other solvents for deep wetting and wiping, very slow dry
TZ32	specific for roller application

**APPLICATION SYSTEM:** Spray or roller

**QUANTITY(grsq mt):** 50 - 60 (2-2.4 wet mils)

**COATS:** One

**GENERAL PROPERTIES:** Specific Gravity, gr/cc 0.97 +/- 0.05  
Viscosity\* 10 +/- 2 sec

\* ASTM D1200 (Ford) #4 at 20°C/68°F

**DRYING TIME:** Handling and topcoating, solvent systems 30 - 60 sec  
(at 20°C/68°F) Handling and topcoating, water systems 8 hours minimum

**(tunnel 60\*c or IR oven)** Handling and topcoating, solvent systems 10 sec  
Handling and topcoating, water systems 20 minutes minimum

**AVAILABLE COLORS:**

<b>PF50*</b> White	<b>PF51</b> Yellow	<b>PF54</b> Orange
<b>PF55</b> Red	<b>PF57</b> Violet	<b>PF58</b> Blue
<b>PF59</b> Black	<b>PF 5V</b> Green	<b>PF5B</b> White for water based systems
<b>PF5T05</b> Medium walnut	<b>PF5T07</b> Dark walnut	<b>PF5T06</b> Mahogany
<b>PF5T01</b> Honey	<b>PF5T02</b> Cherry	<b>PF5T08</b> Rosewood
<b>PF5K18*</b> Wenge	<b>PF5WB18</b> Water Reducible Wenge	

**\*PF50 & PF5K18 can be used only in solvent, not in water**

**SHELF LIFE:** One year

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97 Latest Revision 5-13, 5-16, 9-16

**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>	ILVATINT	
<b>PRODUCT CODE:</b>	PG 1/series	
<b>DESCRIPTION:</b>	Stains for spray, wipe and rollcoat applications	
<b>USES:</b>	Pigment stain concentrates for maximum light fastness.	
<b>PRODUCT PREPARATION:</b>	PG 1/ser. Stain TZ33NH Thinner PF91 Vehicle	100 parts by weight 10 - 50 parts by weight 5 - 25 parts by weight
	<b>Thinners selection:</b>	
	TZ33NH	Specific for spray and wipe
	TZ14	For deep wetting and staining, slow dry
	TZ08	Can be added to TZ14 to allow for better wetting and additional wiping time. Very slow dry.
<b>APPLICATION SYSTEM:</b>	Spray and wipe	
<b>QUANTITY(grsq mt):</b>	10 - 30 (.4-1.2 wet mils)	
<b>COATS:</b>	One	
<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc Viscosity*	1.00 +/- 0.05 15 +/- 2 sec
	* ASTM D1200 (Ford) #4 at 20°C/68°F	
<b>DRYING TIME:</b> (at 20°C/68°F)	Handling and topcoating:	30 - 60 sec
(tunnel 60°C or IR oven)	Handling and topcoating:	10 sec
<b>COLORS AVAILABLE:</b>	PG10 PG11 PG13 PG14 PG15 PG18 PG19 PG1/Z01	white yellow yellow oxide orange red blue black green
<b>SHELF LIFE:</b>	One year	
<b>STORAGE:</b>	Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.	
<b>DATE OF ISSUANCE:</b>	03 - 97 Revised 4-08, 5-16	

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:**     **ACRIPOL**

**PRODUCT CODE:**     **PI 29**

**DESCRIPTION:**       **Unsaturated Polyester Black Undercoat**

**USES:**                 Sanding sealer for MDF flat and shaped panels, doors etc.  
Can be topcoated with matte and gloss polyurethane finishes.

<b>PRODUCT PREPARATION:</b>		Parts by weight	Parts by volume
	PI29 Black polyester undercoat	100	128
	TV72 Accelerator*	2	2
	TV84 Long pot life catalyst	2	2
	TZ03 Thinner	5 - 15	20

*\*use 1 part TV72 in hot weather, 2 parts in cold weather*

**APPLICATION SYSTEM:**     Double component spray equipment is recommended.

**QUANTITY(grsq mt):**       150 - 200 per coat (6-8 wet mils)

**COATS:**                     2 to 3

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.27 +/-0.05
	Viscosity*	30 +/-2 sec
	Application Viscosity**	30-35 sec
	Solids by Weight, %	92 +/-2
	Pot Life, minutes at 20°C/68°F	30-40

\*DIN 53211 Nr.4 at 20°C/68°F  
\*\*DIN 53211 Nr. 4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	Gel time, between coats, minutes	20-30 minimum
	For sanding and topcoating, hours	24 minimum

<b>TYPICAL SYSTEMS:</b>	Substrate	MDF
	<b>Gloss Finish</b>	
	TF25/TV19                     1 coat	40 gr/sq.mt. (1.6 wet mils)
	PI29/TV72/TV84           2 - 3 coats	150/200 gr/sq.mt. per coat (6-8 wet mils)
	PM19/TX51                   2 coats	150 gr/sq.mt. (6 wet mils)
	<b>Matte Finish</b>	
	TF25/TV19                     1 coat	40 gr/sq.mt. (1.6 wet mils)
	PI29/TV72/TV84           2 - 3 coats	150/200 gr/sq.mt. per coat (6-8 wet mils)
	PL59/TX50                    1 coat	150 gr/sq.mt. (6 wet mils)

**SHELF LIFE:**             One Year

**STORAGE:**               Store in a tightly closed container at room temperatures (18-25°C/64-75°F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:**     06-10, Revised 12-13, 5-16

**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:**     **ACRIPOL**

**PRODUCT CODE:**     **PI 40**

**DESCRIPTION:**       **Unsaturated Polyester White Undercoat**

**USES:**                 Sanding sealer for MDF flat and shaped panels, doors, etc. Can be topcoated with matte and gloss polyurethane finishes, or with gloss polyester.

<b>PRODUCT PREPARATION:</b>		Parts by weight	Parts by volume
PI40 White Polyester Undercoat		100	128
TV72* Accelerator		2	2
TV84 Long pot life catalyst		2	2
TZ03 Thinner		10-20	32
<i>* Use 1 part TV72 in hot weather, 2 parts in cold weather</i>			

**APPLICATION SYSTEM:**     Double component spray equipment is recommended.

**QUANTITY:**             150 - 200 per coat (gr sq mt) (6-8 wet mils)

**COATS:**                 2 to 3

<b>GENERAL PROPERTIES:</b>		
Specific Gravity, gr/cc		1.39 +/-0.05
Viscosity, DIN 53211 #8 at 20°C/68°F		18 +/- 2 sec
Application Viscosity*		18-30 secs
Solids by Weight, %		85 +/- 2
Pot Life, hours at 20°C/68°F		90 minutes

\*ASTM D1200 (Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	Between coats, minutes:	30 minimum
	Between coats, hours:	3 maximum
	For sanding and topcoating, hours:	24 minimum

**TYPICAL SYSTEMS:**     Substrate:                                     MDF

**Gloss Finish**

TF25/TV19	1 coat	40 gr/sq mt (1.6 wet mils)
PI40/TV72/TV84	2-3 coats	150/200 gr/sq mt (per coat) (6-8 wet mils)
PM10/TX75	1 coat	150 gr/sq mt. (6 wet mils)

**Matte Finish**

TF25/TV19	1 coat	40 gr/sq mt (1.6 wet mils)
PI40/TV72/TV84	2-3 coats	150/200 gr/sq mt (per coat) (6-8 wet mils)
PL50/TX75	1 coat	150 gr/sq mt. (6 wet mils)

**SHELF LIFE:**             One Year

**STORAGE:**             Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:**     03 - 97 Revised 12-13, 5-16

**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:** ILVANOL

**PRODUCT CODE:** PL 50

**DESCRIPTION:** Polyurethane White Satin Finish

**USES:** Polyurethane white matte topcoats, suitable for open and closed grain systems, for flat panels and assembled furniture.

<b>PRODUCT PREPARATION:</b>	PL50 Polyurethane White Matte	<u>Parts by weight</u> 100	<u>Parts by volume</u> 128
	TX75 Hardener (non-yellowing)	40	64
	TZ13 Thinner	15-30	30

**APPLICATION SYSTEMS:** Airless, air-assisted, conventional spray, or curtain coater

**QUANTITY:** 120 140 per coat(gr sq mt) (4.8-5.6 wet mils)

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.28 +/- 0.05
	Viscosity*	85 +/- 2 sec
	Application Viscosity*spray	10 +/- 2 sec
	Application Viscosity*curtain coater	18 +/- 2 sec
	Solids by Weight, %, as supplied	62 +/- 2
	Solids by Weight, %, ready to use	40-45
	Pot Life, hours at 20°C/68°F	3

\* ASTM D1200 (Ford) #4 at 20°C/68°F

**DRYING TIME:**  
(at 20°C/68°F)

To handle:	1 hour
To stack:	Over night

**AVAILABLE SHEENS:** PL50 25-30 Sheen

**TYPICAL SYSTEMS:** Substrate: MDF (closed grain), Ash (open grain)

**Open Grain Finish**

PA20/TX50	1 coat	120 gr/sq mt. (4.8 wet mils)
PL50/TX75	1 coat	120 gr/sq mt. (4.8 wet mils)

**Closed Grain Finish**

TF25/TV19	1 coat	40 gr/sq mt (1.6 wet mils)
PI40/TV72/TV84	2-3 coats	150/200 gr/sq mt (6-8 wet mils)
PL50/TX75	1 coat	120 gr/sq mt. (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97 Revised 12-13, 5-14, 5-16, 9-16, 10-17, 4-18, 9-18

**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:** ILVANOL

**PRODUCT CODE:** PL 59

**DESCRIPTION:** Polyurethane Satin Finish, Black

**USES:** Polyurethane matte topcoat suitable for open pore systems. Quick drying, can be cured with hot air ovens or at room temperature.

<b>PRODUCT PREPARATION:</b>	PL59 Polyurethane matte finish	<u>Parts by weight</u> 100	<u>Parts by volume</u> 128
	TX50 Hardener	50	64
	TZ13 Thinner	25	32

**APPLICATION SYSTEM:** Spray and curtain coater

**QUANTITY(grsq mt):** 120 - 130 (4.8-5.2 wet mils)

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.00 - 1.26	
	Viscosity*	30 - 80 sec	
	Application Viscosity*	25 +/- 2 sec	(curtain)
	Application Viscosity*	15 +/- 2 sec	(spray)
	Solids by Weight, %, as supplied	47 - 54	
	Solids by Weight, %, ready to use	43 - 50	
Pot Life, hours at 20°C/68°F	3		

\* ASTM D1200 (Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	To handle:	1 hour
	To stack:	Overnight

Vertical oven cycle:	Flash off	12 minutes
	45°C/113°F	45 minutes
	cooling	12 minutes

**TYPICAL SYSTEMS:** Substrate: Various veneers

<b>Open pore</b>		
PA39/TX19	1 coat	120 gr/sq.mt. (4.8 wet mils)
PL59/TX50	1 coat	120 gr/sq.mt. (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97, Revised 12-13, 5-16, 10-17, 4-18, 8-18, 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:** ILVACRIL

**PRODUCT CODE:** PL 80

**DESCRIPTION:** Acrylic - urethane matte finish, pigmented white

**USES:** Acrylic-urethane white matte topcoats, suitable for open and closed grain systems, for flat panels and assembled furniture. Maximum yellowing resistance.

<b>PRODUCT PREPARATION:</b>	PL80 Acrylic-urethane matte finish white	<u>Parts by weight</u> 100	<u>Parts by volume</u> 128
	TX90 Hardener	25	40
	TZ13 Thinner*	50	90
	*Use TZ4223 in hot, humid weather		

**APPLICATION SYSTEM:** Spray or curtain coater

**QUANTITY(grsq mt):** 120 - 140 per coat (4.8-5.6 wet mils)

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.16 +/- 0.05
	Viscosity*	30 +/- 2 sec
	Application Viscosity**(spray)	15 +/- 2 sec
	Application Viscosity**(curtain coater)	18 +/- 2 sec
	Solids by Weight, %, as supplied	45 +/- 2
	Solids by Weight, %, ready to use	49 +/- 2
	Pot Life, hours at 20°C/68°F	3

\* DIN 53211 Nr.6 at 20°C/68°F

\*\* DIN 53211 Nr.4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	To handle:	1 hour
	To stack:	24 hours minimum

<b>AVAILABLE SHEENS:</b>	PL80	35 Sheen
	PL1W06	25 Sheen
	PL1W05	5 Sheen

**TYPICAL SYSTEMS:** Substrate MDF(closed grain), ash(open grain)

**Open Grain Finish**

PA20/TX50	One coat	120 gr/sq.mt.(4.8 wet mils)
PL80/TX90	One coat	120 gr/sq.mt.(4.8 wet mils)

**Closed grain finish**

TF25/TV19	One coat	40 gr/sq.mt. (1.6 wet mils)
PI40/TV72/TV80	Two/three coats	150 - 200 gr/sq.mt. per coat (6-8 wet mils)
PL80/TX90	One coat	120 gr/sq.mt. (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97 Revised 12-13, 2-16, 5-16, 12-16, 10-17

**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:** ILVANOL

**PRODUCT CODE:** PL 800 Series

**DESCRIPTION:** Polyurethane White Matte Finish

**USES:** Polyurethane white flat topcoats. suitable for open and closed grain systems, for flat panels and assembled furniture. Packed in 20 KG pails for use as tintometric system base or a stand-alone product.

<b>PRODUCT PREPARATION:</b>	<u>Parts by weight</u>	<u>Parts by volume</u>
PL800 Series Polyurethane White Matte	100	128
TX75 Hardener (non-yellowing)*	40	64
TZ13 Thinner	15-30	30
*TX72 for faster set time with slightly less non-yellowing properties.		

**APPLICATION SYSTEMS:** Airless, air-assisted, conventional spray, or curtain coater

**QUANTITY:** 120 140 per coat(gr sq mt) (4.8-5.6 wet mils)

**COATS:** One

<b>GENERAL PROPERTIES:</b>		
Specific Gravity, gr/cc		1.28 +/-0.05
Viscosity*		62 +/-3 sec
Application Viscosity*spray		10 +/-2 sec
Application Viscosity*curtain coater		18 +/- 2 sec
Solids by Weight, %, as supplied		65 +/-2
Solids by Weight, %, ready to use		58
Pot Life, hours at 20°C/68°F		3
* ASTM D1200 (Ford) #4 at 20°C/68°F		

<b>DRYING TIME:</b> (at 20°C/68°F)	To handle:	1 hour
	To stack:	Over night

<b>AVAILABLE SHEENS:</b>	PL800/50	50 sheen
	PL800/20	20 sheen
	PL800/10	10 Sheen
	PL800/05	5 Sheen

**TYPICAL SYSTEMS:** Substrate: MDF (closed grain), Ash (open grain)

**Open Grain Finish**

PA20/TX50	1 coat	120 gr/sq mt.(4.8 wet mils)
PL800 Series/TX75	1 coat	120 gr/sq mt.(4.8 wet mils)

**Closed Grain Finish**

TF25/TV19	1 coat	40 gr/sq mt (1.6 wet mils)
PI40/TV72/TV84	2-3 coats	150/200 gr/sq mt (6-8 wet mils)
PL800 Series/TX75	1 coat	120 gr/sq mt. (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 01-12, Revised 12-13, 3-15, 5-16, 9-16, 10-17

**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:** ILVALUX

**PRODUCT CODE:** PM 10

**DESCRIPTION:** Polyurethane White Gloss Finish

**USES:** Polyurethane white gloss topcoats, suitable for MDF panels and assembled furniture.

<b>PRODUCT PREPARATION:</b>	PM10 Polyurethane White Gloss Finish	<u>Parts by weight</u>	<u>Parts by volume</u>
	TX75 Hardener	100	128
	TZ13 Thinner	80	128
		15 - 30	25-50

**APPLICATION SYSTEM:** Conventional, air-assisted airless spray, or curtain coater.

**QUANTITY:** 140 - 180 gr sq mt per coat (4.8-7.2 wet mils)

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.30 +/- 0.05
	Viscosity*	85 +/- 2 sec
	Application Viscosity*for spray	10 +/- 2 sec
	Application Viscosity*for curtain coater	18 +/- 2 sec
	Solids by Weight, %, as supplied	68 +/- 2
	Solids by Weight, %, ready to use	40-45
	Pot Life, hours at 20°C/68°F	4

\* ASTM D1200 (Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	To handle:	2 hours
	To stack:	24 hours minimum
	Buffing:	48 hours minimum

<b>TYPICAL SYSTEMS:</b>	TF25/TV19	1 coat	40 gr/sq mt (1.6 wet mils)
	PI40/TV72/TV84	2-3 coats	150/200 gr/sq mt (6-8 wet mils)
	PM10/TX75	1 coat	120 gr/sq mt. (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97, 12-13, 5-16, 10-17

**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:** ILVALUX

**PRODUCT CODE:** PM 19

**DESCRIPTION:** Polyurethane gloss black topcoat

**USES:** Polyurethane gloss topcoat, suitable for MDF panels and assembled furniture.

<b>PRODUCT PREPARATION:</b>	PM19 Polyurethane gloss finish	<u>Parts by weight</u> 100	<u>Parts by volume</u> 128
	TX51 Hardener	100	128
	TZ13 Thinner (spray)	50	25-50

**APPLICATION SYSTEM:** Spray, curtain coater

**QUANTITY(grsq mt):** 140 - 180 per coat (4.8-7.2 wet mils)

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.3 +/- 0.05
	Viscosity*	25 +/- 2 sec
	Application Viscosity**(spray)	10 +/- 2 sec
	Application Viscosity**(curtain)	18 +/- 2 sec
	Solids by Weight, %, as supplied	68 +/- 2
	Solids by Weight, %, ready to use	49 +/- 2
	Pot Life, hours at 20°C/68°F	4

\* ASTM D1200 (Ford) #6 at 20°C/68°F

\*\* ASTM D1200 (Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	To handle:	2 hours
	To stack:	24 hours minimum
	Buffing	48 hours minimum

<b>TYPICAL SYSTEMS:</b>	Substrate	MDF
	TF25/TV19	1 coat 40 gr/sq.mt. (1.6 wet mils)
	PI29/TV72/TV84	2 - 3 coats 150/200 gr/sq.mt. (6-8 wet mils)
	PM19/TX51	1 coat 120 gr/sq.mt. (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97 Revised 12-13, 5-16, 10-17

**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:** ILVALUX

**PRODUCT CODE:** PM 80

**DESCRIPTION:** Acrylic-urethane gloss finish, pigmented white

**USES:** Acrylic-urethane white gloss top coats, suitable for closed grain systems, for flat panels and assembled furniture. Maximum yellowing resistance.

<b>PRODUCT PREPARATION:</b>		<u>Partys by weieght</u>	<u>Parts by volume</u>
	PM80 Acrylic-urethane gloss finish white	100	128
	TX90 Non-yellowing curing agent	50	84
	TZ13 Thinner	20 - 40	64

**APPLICATION SYSTEM:** Spray or curtain coater

**QUANTITY(grsq mt):** 120 - 140 per coat (4.8-5.6 wet mils)

**COATS:** One or two

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.23 +/- 0.05
	Viscosity*	85 +/- 2 sec
	Application Viscosity**(spray)	15 +/- 2 sec
	Application Viscosity**(curtain coater)	18 +/- 2 sec
	Solids by Weight, %, as supplied	57 +/- 2
	Solids by Weight, %, ready to use	49 +/- 2
	Pot Life, hours at 20°C/68°F	3

\* DIN 53211 Nr.6 at 20°C/68°F

\*\* DIN 53211 Nr.4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	To handle:	1 hour
	Top coating with itself without sanding:	3 hours minimum 5 hours maximum
	To stack:	24 hours minimum
	To buff:	72 hours minimum

<b>TYPICAL SYSTEMS:</b>	Substrate	MDF
	TF25/TV19	One coat 40 gr/sq.mt. (1.6 wet mils)
	PI40/TV72/TV80	Two/sealer 150/200 gr/sq.mt. per coat (6-8 wet mils)
	PM80/TX90	One or two coats 120 gr/sq.mt. per coat (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97, Revised 12-13, 5-16, 10-17

**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 CODE:** PU1252

**DESCRIPTION:** Pearlescent Acrylic Urethane

**USES:** Pearlescent acrylic urethane topcoats, suitable as finishes for various furniture

<b>PRODUCT PREPARATION:</b>	PU1252	Pearlescent Acrylic Urethane Finish	<u>Parts by weight</u>	<u>Parts by volume</u>
	TX90	Hardener (light colored finishes)	100	128
	TZ4223	Thinner	20	26
			20-30	20-30

**APPLICATION SYSTEM:** Spray

**QUANTITY(grams mt):** 110 - 120 per coat (4.4-4.8 wet mils)

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.05 +/- 0.05
	Viscosity*	98 +/- 2 sec
	Appl.Viscosity*	12 +/- 2 sec
	Pot Life, hours at 20°C/68°F	4

\* DIN 53211 Nr.4 at 20°C/68°F

**DRYING TIME:**  
(at 20°C/68°F)

Handling: 2 hours

**TYPICAL SYSTEMS:**

Substrate MDF, various woods

**With polyurethane undercoat**

PA20/TX50	1 or 2 coats	120 gr/sq.mt. per coat (4.8 wet mils)
PL50/TX75	1 coat	120 gr/sq.mt. (4.8 wet mils)
PU1252/TX90	1 coat	120 gr/sq.mt. (4.8 wet mils)
TP11/TX90	2 coats	120 gr/sq.mt. per coat (4.8 wet mils)

**With polyester undercoat**

PI40/TV72/TV80	2 or 3 coats	200 gr/sq.mt. per coat (8 wet mils)
PL50/TX75	1 coat	120 gr/sq.mt. (4.8 wet mils)
PU1252/TX90	1 coat	120 gr/sq.mt. (4.8 wet mils)
TP11/TX90	2 coats	120 gr/sq.mt. per coat (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 07, Revised 12-13, 8-15, 5-16, 10-17

**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.

## TECHNICAL DATA SHEET

**PRODUCT CODE:** PX 70

**DESCRIPTION:** Matting agent additive for acrylic urethanes

**USES:** Use as a matting agent additive for acrylics, TS 0 series.  
Not for use in the PM series polyurethanes.

**PRODUCT APPLICATION:** Add up to 10% maximum to adjust gloss of Acrylic Urethane products

**PRODUCT APPLICATION:** Typical of the product to be adjusted

**GENERAL PROPERTIES:**

Specific Gravity, gr/cc	1.10 +/- 0.05
Solids by Weight, %	51 +/- 2

**SHELF LIFE:** One year

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97 Revised 4-02

**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.

## TECHNICAL DATA SHEET

**PRODUCT CODE:** PX 71

**DESCRIPTION:** Matting agent additive - General Purpose

**USES:** Used as a matting agent additive for polyurethanes, TO 0 series and PL 5 series  
Do not use in PM series polyurethanes

**PRODUCT PREPARATION:** Add up to 10% maximum to adjust gloss of polyurethane or nitrocellulose finishes

**PRODUCT APPLICATION:** Typical of the product to be adjusted

**GENERAL PROPERTIES:**

Specific Gravity, gr/cc	1.00 +/- 0.05
Solids by Weight, %	48 +/- 2

**SHELF LIFE:** One year

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97 Revised 4-02

**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 CODE:** PZ3.../COLOR SERIES

**DESCRIPTION:** POLYURETHANE PIGMENTED TINT PASTE

**USES:** Tinting colors for Polyurethane Products. In general they may be used in all polyurethane systems at a level of 20-30% maximum combined color level with no effect on film properties, only gloss levels at the maximum level of tint paste. If used in Acrylic Urethane maximum level is 10%

<b>AVAILABLE COLORS:</b>	<b>PZ330</b> White <b>PZ331</b> Vivid Yellow <b>PZ332</b> Gold Yellow <b>PZ333</b> Yellow Oxide <b>PZ335</b> Wisteria Red <b>PZ336</b> Red Oxide <b>PZ337</b> Bordeaux <b>PZ338</b> Blue <b>PZ339</b> Black <b>PZ340</b> Green <b>PZ341</b> Lemon Yellow <b>PZ344</b> Vivid Red <b>PZ347</b> Violet <b>PZ355</b> Red Concentrate <b>PZ361</b> Yellow <b>PZ364</b> Orange
--------------------------	---

CHEMICAL/PHYSICAL PROPERTIES	CODE	Density (Kg/l)	Density (lb/US gal)	Solid content %
	PZ330	1.877 +/- 0.030	15.7 +/- 0.3	74.0 +/- 2
	PZ331	0.987 +/- 0.030	8.2 +/- 0.3	48.0 +/- 2
	PZ332	1.081 +/- 0.030	9.0 +/- 0.3	49.0 +/- 2
	PZ333	1.550 +/- 0.030	12.9 +/- 0.3	54.0 +/- 2
	PZ335	0.995 +/- 0.030	8.3 +/- 0.3	35.0 +/- 2
	PZ336	1.608 +/- 0.030	13.4 +/- 0.3	39.0 +/- 2
	PZ337	1.056 +/- 0.030	8.8 +/- 0.3	54.0 +/- 2
	PZ338	1.071 +/- 0.030	8.9 +/- 0.3	32.0 +/- 2
	PZ339	1.040 +/- 0.030	8.7 +/- 0.3	44.0 +/- 2
	PZ340	1.074 +/- 0.030	9.0 +/- 0.3	46.0 +/- 2
	PZ341	1.590 +/- 0.030	13.3 +/- 0.3	68.0 +/- 2
	PZ344	1.028 +/- 0.030	8.6 +/- 0.3	39.0 +/- 2
	PZ347	1.038 +/- 0.030	8.7 +/- 0.3	38.0 +/- 2
	PZ355	1.081 +/- 0.030	9.0 +/- 0.3	56.0 +/- 2
	PZ361	1.091 +/- 0.030	9.1 +/- 0.3	48.0 +/- 2
	PZ364	1.102 +/- 0.030	9.2 +/- 0.3	43.0 +/- 2

**USAGE INDICATIONS:** Must thoroughly mix paste before use. It is advisable to add pastes under mechanical mixing. Quantities must be weighed with high precision balances.

**SHELF LIFE:** One Year

**STORAGE:** Store in a tightly closed container at room temperature 18-25°C, 64-75°F and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 12-16

**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:** ILVANOL

**PRODUCT CODE:** TA 03

**DESCRIPTION:** Polyurethane Clear Sealer

**USES:** Sealer for polyurethane clear systems, suitable for skirting boards, panels, frames, doors and assembled furniture.

<b>PRODUCT PREPARATION:</b>		<u>Parts by weight</u>	<u>Parts by volume</u>
	TA03 Polyurethane Clear Sealer	100	128
	TX50* Hardener	50	64
	TZ33 Thinner	0 - 10	0-20
	* TX75 for non-yellowing	40	50

**APPLICATION SYSTEM:** Airless, Air-assisted, Conventional Spray, or Curtain Coater

**QUANTITY:** 120 - 140 per coat (gr. sq. mt.) (4.8-5.6 wet mils)

**COATS:** One - for open grained systems

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	0.97 +/- 0.05
	Viscosity*	85 +/- 2 sec
	Application Viscosity*	15 +/- 2 sec
	Solids by Weight, %, as supplied	40 +/- 2
	Solids by Weight, %, ready to use	31-35
	Pot Life, hours at 20°C/68°F	4

\* ASTM D1200 (Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	Handling:	30 - 40 minutes
	Sanding and topcoating:	8 hours minimum

**TYPICAL SYSTEMS:** Substrate: Various woods

**Open Grain Finish**

TA03/TX50*	1 coat	120 gr/sq. mt. (4.8 wet mils)
TO9 Series/TX24	1 coat	120 gr/sq. mt. (4.8 wet mils)
* TX75 for non-yellowing		

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97 Revised 12-13, 5-16, 10-17

**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:** ILVACRIL

**PRODUCT CODE:** TA 0012

**DESCRIPTION:** Acrylic Urethane VOC/C Sealer

**USES:** Sealer for acrylic systems, suitable for light colored wood such as maple, ash, birch, etc. Low VOC formulation.

<b>PRODUCT PREPARATION:</b>		<u>Parts by weight</u>	<u>Parts by volume</u>
TA0012 Acrylic Urethane VOC/C Sealer		100	128
TX1939 Hardener		20	26
TZ33 or TZ780 Thinner		0-20	0-20

**APPLICATION SYSTEM:** Airless, Air-Assisted, Conventional Spray, or Curtain Coater

**QUANTITY:** 120 - 140 per coat (gr sq mt) (4.8-5.6 wet mils)

**COATS:** One - for open grained systems  
Two to Four - for closed grain systems

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	0.95 +/- 0.05
	Viscosity*	38 +/- 2 sec
	Application Viscosity*	16 +/- 2 sec
	Solids by Weight, % as supplied	35 +/- 2
	Solids by weight, % ready to use	30 +/- 2
	Pot Life, hours at 20°C/68°F	4

\*ASTM D1200 (Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	Handling:	2 hours minimum
	Sanding and topcoating:	Over night

(at 40 °C/104°F for 90 min)	Handling and assembling:	Immediate, after cooling
	Sanding and topcoating:	6 hours minimum

**TYPICAL SYSTEMS:** Substrate: Ash, Maple, Birch

**Open Grain Finish, Matte**

TA0012/TX1939	1 coat	120 gr/sq mt. (4.8 wet mils)
TS000Series/TX1939	1 coat	120 gr/sq mt. (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18-25°C/64-75°F) and protect from moisture and foreign material

**DATE OF ISSUANCE:** 02-06, Revised 12-13, 8-15, 5-16, 12-16, 10-17

**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:** ILVANOL

**PRODUCT CODE:** TA 44

**DESCRIPTION:** Ultra Clear Polyurethane Sealer

**USES:** Excellent clarity, adhesion, and wetting properties. Recommended for dark stains and woods to reduce pore whitening effects.

<b>PRODUCT PREPARATION:</b>		<u>Parts by weight</u>	<u>Parts by volume</u>
	TA44 Clear polyurethane sealerr	100	128
	TX11 Hardener*	50	64
	TZ33 Thinner	5 - 20	0-30
	*TX75 for non-yellowing	40	50

**APPLICATION SYSTEM:** Spray and curtain coat

**QUANTITY(grsq mt):** 120 - 160 per coat (4.8-6.4 wet mils)

**COATS:** Two

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/lt	0.98 +/- 02
	Viscosity*	66 +/- 2 sec
	Application Viscosity for curtain*	20 +/- 4 sec
	Application Viscosity for spray*	15 +/- 2 sec
	Solids by Weight, %, as supplied	50 +/- 2
	Solids by Weight, %, ready to use	44 +/- 2
	Pot Life, hours at 20°C	4

\* (DIN 53211 mm. 4) at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	Handling:	2 hours at room temperature or 1 hour hot air oven at 40-50°C
	Sanding and topcoating	24 hours minimum

<b>TYPICAL SYSTEMS:</b>	Substrate:	Various woods
	PF5 Stain	
	TA44/TX11	1-2 coats 120 gr/sq mt. (4.8 wet mils)
	TO9 series/TX24	1 coat 120 gr/sq mt. (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 10-03 Revised 12-13, 5-16, 10-17

**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:** ILVANOL

**PRODUCT CODE:** TA 48

**DESCRIPTION:** Clear polyurethane undercoat

**USES:** High coverage spray undercoat for cabinetry and furniture.

<b>PRODUCT PREPARATION:</b>	TA48 Clear polyurethane undercoat	<u>Parts by weight</u>	<u>Parts by volume</u>
	TX11 Hardener	100 parts	128
	TX11 Hardener	50	64
	TZ33 Thinner	10 - 20	0-30

**APPLICATION SYSTEM:** Spray

**QUANTITY(grsq mt):** 120 - 140 per coat (4.8-5.6 wet mils)

**COATS:** Two

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	0.99 +/- 0.05
	Viscosity*	47 +/- 2 sec
	Application Viscosity*	16 +/- 2 sec
	Solids by Weight, %, as supplied	48 +/- 2
	Solids by Weight, %, ready to use	43 +/- 2
	Pot Life, hours at 20°C	4

\* ASTM D1200 (Ford) #4 at 20°C/68°F

**DRYING TIME:**  
(at 20°C/68°F)

Handling:	2 hours minimum
Sanding and topcoating	24 hours minimum

**TYPICAL SYSTEMS:**

Substrate:	Various woods	
TA48/TX11	1 coat	120 gr/sq mt. (4.8 wet mils)
TO9 series/TX24	1 coat	120 gr/sq mt. (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97 Revised 12-13, 5-16, 10-17

**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 CODE:** TB15 Series

**DESCRIPTION:** CLEAR COMBI COAT SELF-SEALER FINISH (SEALER AND TOPCOAT)

**USES:** GENERAL USE FOR FURNITURE, STORE FIXTURES

**PRODUCT PREPARATION**

TB15 Series	100 parts by weight
TZ33 or TZ35*	10-30 parts by weight

To improve mechanical and chemical resistance properties it is necessary to add TX90 Acrylic Hardener at 5-10%. The use of hardeners can effect the gloss. When using hardeners pot life is maximum 8 hours (at 20°C/68°F). When using hardener, it is suitable to use standard polyurethane thinners and a higher thinning ratio may be necessary.

\*To optimize dilution in summertime a small addition of retarder such as TZ14 or TZ08 may be necessary.

**APPLICATION SYSTEM:** Spray and curtain coat.

**QUANTITY:** 120 gr. sq.mt. per coat

**COATS:** Up to three, maximum

**GENERAL PROPERTIES:**

Specific Gravity, gr/cc	.935	+/-0.02
Viscosity*	18	+/-3 sec.
Application Viscosity* *(curtain coat)	30	+/-5 sec.
Application Viscosity*** (spray)	22	+/-5 sec
Solids by Weight, %, as supplied	27	+/-2

\* DIN 53211 mm 6 at 20°C/68°F  
 \*\*DIN53211 mm4 at 20°C/68°F  
 \*\*\*DIN53211 mm4 at 20°C/68°F

**DRYING TIME:** Sanding: after 2-4 hours  
 The 2nd coat may be applied without sanding (wet-on-wet) after 2 hours - and before 8 hours

**GLOSS:**

TB14	40 gloss
TB1511	70 gloss
TB1512	50 gloss
TB1514	25 gloss
TB1516	10 gloss
PU2363	1-5 gloss

**TYPICAL SYSTEMS:**

Substrate:	Solid wood or veneer,
Stain:	PF 5/color series Stain solvent Base
Sealer:	TB15 Series Combi Coat - 1 to 2 coats
Antic effect	PD1/color series Solvent base patina
Topcoat	TB15 Series Combi Coat - 1 coat

TB15 Series Combi Coat can be eventually tinted with concentrated stains PF 5.series

**SHELF LIFE:** 15 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25°C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 4-10, 6-17, 10-17, 1-18, 4-18

**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:** ILVAPOL

**PRODUCT CODE:** TC 10

**DESCRIPTION:** Unsaturated paraffined polyester for application to vertical surfaces

**USES:** Assembled furniture, gloss "wet look" appearance.  
Excellent thixotropic properties and leveling.

<b>PRODUCT PREPARATION:</b>		<u>Parts by weight</u>	<u>Parts by volume</u>
	TC10 Paraffined Unsaturated Polyester	100	128
	TV72 Accelerator	2	3
	TV80 Peroxide Catalyst	2	2

**APPLICATION SYSTEM:** Two pack polyester spray equipment

**QUANTITY(grams mt):** 200 per coat (8 wet mils)

**COATS:** Three

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.03 +/- 0.05
	Viscosity*	12000 +/- 2000
	Solids by Weight, %	98 +/- 2
	Pot Life, minutes at 20°C/68°F	20
	Pot Life, catalyzed pot (double catalyst quantity) hours at 20°C/68°F	4
	Pot Life, accelerated pot (double accelerator quantity) hours at 20°C/68°F	24
	* Brookfield, spindle #5, cps at 20°C/68°F	

<b>DRYING TIME:</b> (at 20°C/68°F)	Between first and second coat	20 - 30 minutes
	Between second and third coat	15 - 20 minutes
	After third coat (gel formation)	10 - 15 minutes
	After third coat (sanding and buffing)	24 hours minimum

<b>TYPICAL SYSTEMS:</b>	Substrate	Various woods	
	<b><u>Transparent system</u></b>		
	TF25/TV19	1 coat	40 gr/sq.mt. (1.6 wet mils)
	TC10/TV72/TV80	3 coats	200 gr/sq.mt. per coat (8 wet mils)
	Sanding and buffing		
	<b><u>Pigmented system</u></b>		
	TF25/TV19	1 coat	40 gr/sq.mt.(1.6 wet mils)
	TC10/PZ6../TV72/TV80	3 coats	200 gr/sq.mt. (8 wet mils)
	Sanding and buffing		

**SHELF LIFE:** One Year

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97 Revised 12-13, 5-16

**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:** ILVAPOL

**PRODUCT CODE:** TC 11

**DESCRIPTION:** Unsaturated paraffined polyester for spray application

**USES:** Assembled furniture, gloss "wet look" appearance.  
Good thixotropic properties and leveling.

<b>PRODUCT PREPARATION:</b>	TC11 Paraffined unsat. polyester	<u>Parts by weight</u> 100	<u>Parts by volume</u> 128
	TV72 Accelerator	2	3
	TV80 Peroxide catalyst	2	2

**APPLICATION SYSTEM:** Two pack polyester spray equipment is recommended

**QUANTITY(grams mt):** 200 per coat (8 wet mils)

**COATS:** 2 or 3 minimum

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.03 +/- 0.05
	Viscosity*	25 +/- 2 sec
	Solids by Weight, %	98
	Pot Life, at 20°C/68°F	30 minutes
	Pot Life, catalyzed pot (double catalyst quantity) at 20°C/68°F	4 hours
	Pot Life, accelerated pot (double accelerator quantity) at 20°C/68°F	24 hours

\* DIN 53211 Nr.8 at 20°C/68°F

<b>DRYING TIME: (at 20°C/68°F)</b>	Between first and second coat	25 minutes
	Between second and third coat	25 minutes
	After third coat (gel formation)	25 minutes
	After third coat (sanding and buffing)	24 hours minimum

<b>TYPICAL SYSTEMS:</b>	Substrate	Various woods
	<b><u>Transparent system</u></b>	
	TF25/TV19	1 coat 40 gr/sq.mt.(1.6 wet mils)
	TC11/TV72/TV80	3 coats 200 gr/sq.mt. per coat 8 wet mils)
	Sanding and buffing	
	<b><u>Pigmented system</u></b>	
	TF25/TV19	1 coat 40 gr/sq.mt.(1.6 wet mils)
	TC11/PZ 6.../TV72/TV80	3 coats 200 gr/sq.mt. per coat (8 wet mils)
	Sanding and buffing	

**SHELF LIFE:** One Year

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97 Revised 12-13, 5-16

**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 CODE:** TF 1525

**DESCRIPTION:** Haps Compliant Polyurethane Barrier Coat

**USES:** Barrier coat with isolating properties for exotic woods, improves substrates wetting. It must be used with polyester topcoats to prevent curing inhibition caused by some dyes and impurities found in MDF board.

<b>PRODUCT PREPARATION:</b>	TF1525 Polyurethane Barrier Coat	<u>Parts by weight</u>	<u>Parts by volume</u>
	TV19 Accelerator	100	128
	TZ35NH Thinner	5 - 10	8
		25	32

**APPLICATION SYSTEM:** Conventional or air-assisted airless spray

**QUANTITY:** 40 -60 gr sq mt per coat (1.6-2.4 wet mils)

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	0.96 +/- 0.05
	Viscosity*	10 +/- 2 sec
	Application Viscosity* for spray	8 +/- 2 sec
	Solids by Weight, %, as supplied	22 +/- 2
	Solids by Weight, %, ready to use	17 +/- 2
	Pot Life, hours at 20°C/68°F	4

\* ASTM D1200 (Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	Topcoating without sanding:	Minimum 2 hours Maximum 4 hours
---------------------------------------	-----------------------------	------------------------------------

Sanding:	Must sand if not topcoated before 4 hours It is best to wait 8 hours before sanding.
----------	---

**SHELF LIFE:** One Year

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 06-05, Revised 12-13, 5-16, 10-17

**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 CODE:** TF 25

**DESCRIPTION:** Universal Polyurethane Barrier Coat

**USES:** Barrier coat with isolating properties for exotic woods, improves substrates wetting. It must be used with polyester topcoats to prevent curing inhibition caused by some dyes and impurities found in MDF board.

<b>PRODUCT PREPARATION:</b>	<u>Parts by weight</u>	<u>Parts by volume</u>
TF25 Polyurethane Barrier Coat	100	128
TV19 Accelerator	5 - 10	8
TZ35 Thinner	25	32

**APPLICATION SYSTEM:** Conventional or air-assisted airless spray

**QUANTITY:** 40 -60 gr sq mt per coat (1.6-2.4 wet mils)

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	0.96 +/- 0.05
	Viscosity*	10 +/- 2 sec
	Application Viscosity* for spray	8 +/- 2 sec
	Solids by Weight, %, as supplied	22 +/- 2
	Solids by Weight, %, ready to use	17 +/- 2
	Pot Life, hours at 20°C/68°F	4

\* ASTM D1200 (Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	Topcoating without sanding:	Minimum 2 hours Maximum 4 hours
---------------------------------------	-----------------------------	------------------------------------

Sanding:	Must sand if not topcoated before 4 hours It is best to wait 8 hours before sanding.
----------	---

**SHELF LIFE:** One Year

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 97 Revised 12-13, 5-16

**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:** ACRIPOL

**PRODUCT CODE:** TG 1323

**DESCRIPTION:** Unsaturated Polyester Clear Undercoat

**USES:** Sanding sealer for flat and shaped panels, doors, etc. Can be topcoated with matte and gloss polyurethane finishes. Excellent transparency and cold check resistance.

<b>PRODUCT PREPARATION:</b>	<u>Parts by weight</u>	<u>Parts by volume</u>
TG1323 Clear Polyester Undercoat	100	128
TV72* Accelerator	2	2
TV84 Long Pot Life Catalyst	2	2
TZ03 Thinner	5-10	15-30

\* TV72 use 1 part in hot weather, use 2 parts in cold weather.

**APPLICATION SYSTEM:** Double component spray equipment is recommended.

**QUANTITY:** 150 - 200 per coat (gr sq mt) (6-8 wet mils)

**COATS:** 2 to 3

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.07+/-0.05
	Viscosity*	150 +/- 10 secs.
	Application Viscosity*	25-35 secs
	Solids by Weight, %	89 +/-2
	Pot Life, minutes at 20°C/68°F	30-60

\* ASTM D1200 (Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	Between coats, minutes:	30 minimum
	Between coats, hours:	3 maximum
	For sanding and topcoating, hours:	24 minimum

**TYPICAL SYSTEMS:** Substrate: Various woods

**Gloss Finish**

TF25/TV19	1 coat	40 gr/sq mt. (1.6 wet mils)
TG1323/TV72/TV84	2-3 coats	150/200 gr/sq mt. (per coat) (6-8 wet mils)
TP60/TX75	1 coat	150 gr/sq mt. (6 wet mils)

**Matte Finish**

TF25/TV19	1 coat	40 gr/sq mt. (1.6 wet mils)
TG1323/TV72/TV84	2-3 coats	150/200 gr/sq mt. (per coat) (6-8 wet mils)
TO9 series/TX24	1 coat	150 gr/sq mt. (6 wet mils)

**SHELF LIFE:** One Year

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 02 - 98 Revised 12-13, 5-16

**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 CODE:** TO 9/Series

**DESCRIPTION:** Polyurethane Clear Finish

**USES:** Polyurethane clear topcoats, suitable for open and closed grain systems, for flat panels and assembled furniture. This finish exhibits good flow and leveling on verticle applications.

<b>PRODUCT PREPARATION:</b>	TO9/series Polyurethane Clear Finish	<u>Parts by weight</u>	<u>Parts by volume</u>
	TX24* Hardener	100	128
	TZ13 Thinner	50	64
		30	10-30

\*TX50 for slightly faster cure and hardness. TX75 for non-yellowing properties, at 40 parts by weight, 50 by volume

**APPLICATION SYSTEM:** Air Assisted, Conventional, or Electrostatic Spray

**QUANTITY:** 100 - 120 per coat (gr. sq. mt.) (4-4.8 wet mils)

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.00 +/-0.05
	Viscosity*	24 +/-2 sec
	Solids by Weight, %, as supplied	46 +/-1
	Solids by Weight %, catalyzed	39 +/-1
	Pot Life, hours at 20°C/68°F	2- 4 hours

\* DIN 53211 Nr 6 @20°C/68°F

**DRYING TIME:** To handle: 18 Hours

<b>AVAILABLE SHEENS:</b>	TO 00	100 Deg. Gloss
	TO 91	65 Deg. Gloss
	TO 92	50 Deg. Gloss
	TO 93	30 Deg. Gloss
	TO 94	20 Deg. Gloss
	TO 95	15 Deg. Gloss
	TO 96	10 Deg. Gloss
	TO 97	5 Deg. Gloss

**TYPICAL SYSTEMS:** Substrate: Various woods

Color: PF 5 Series Stain  
 Sealer: TA44/TX11/TZ33 1- 2 coat  
 Finish: TO 9 Series

Types of diluents for spray application:  
 TZ33 Medium diluent to be used during winter time  
 TZ13 Medium/slow diluent to be used during summer time  
 TZ14 Slow diluent to be used as retarder in addition to the other diluents  
 TZ4223 Slow diluent to be used during hot, humid summer period.

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03 - 05 Revised 12-13, 5-16, 10-17

**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 CODE:** TO975/SERIES

**DESCRIPTION:** "DIAMANTE" HIGH SCRATCH RESISTANT CLEAR POLYURETHANE

**USES:** FLAT AND ASSEMBLED FURNITURE, TABLES, DESKS. Not recommended over light woods or stains.

PRODUCT PREPARATION	<u>Parts by weight</u>	<u>Parts by volume</u>
TO975/gloss	100	128
TX70	50	64
TZ425 Thinner	10 - 30	10-30

**APPLICATION SYSTEM:** Spray, airless, and air mix, for open and closed pore. Curtain for closed pore.

**QUANTITY:** 120 - 140 per coat (gr. sq.mt.) (4.8-5.6 wet mils)

**COATS:** Only one coat is recommended

GENERAL PROPERTIES:			
Specific Gravity, gr/cc	.954	+/-0.02	
Viscosity*	40	+/-2 sec.	
Application Viscosity*	16	+/-2 sec.	
Solids by Weight, %, as supplied	35	+/-2	
Solids by Weight, %, ready to use	31	+/-2	
Pot Life, hours at 20°C/68°F	>5 hours		
* ASTM D1200 (Ford) #4 at 20°C/68°F			

**DRYING TIME:** At 20°C 18 hours  
With tunnel at 50°C 40-50' (10' cooling)

AVAILABLE SHEENS		
TO9750	90°+Deg. Gloss	
TO9751	65 Deg. Gloss	
TO9752	50 Deg. Gloss	
TO9753	35 Deg. Gloss	
TO9754	25 Deg. Gloss	
TO9755	15 Deg. Gloss	

**TYPICAL SYSTEMS:** Substrate: Various woods  
Stain: Solvent based stain  
Sealer: TA polyurethane clear sealer or TG, TC, polyester clear sealer  
Finish: TO 975/gloss clear matt finish  
Additional coats of polyurethane topcoat are not recommended. If necessary spray the additional coat wet on wet in the time window of 90 minutes to 3 hours after the original coat. If recoating is necessary after 3 hours, sand extremely well with 320 paper first.

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 03-97 Revised 12-13, 5-16, 10-17

**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:** ILVACRYL

**PRODUCT CODE:** TP 11

**DESCRIPTION:** Acrylic Urethane Clear Gloss Finish

**USES:** Glossy finish for acrylic systems, suitable for light colored wood such as maple, ash, birch, etc. Contains a UV inhibitor to resist yellowing.

<b>PRODUCT PREPARATION:</b>		<u>Parts by weight</u>	<u>Parts by volume</u>
	TP11 Gloss Acrylic Urethane Clear	100	128
	TX90 Hardener	20	26
	TZ13 Thinner	20-25	20-30

**APPLICATION SYSTEM:** Airless, Air-Assisted, Conventional Spray, or Curtain Coater

**QUANTITY:** 100 - 120 per coat (gr sq mt) (4-4.8 wet mils)

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	0.94 +/-0.05
	Viscosity*	25 +/-2 sec
	Application Viscosity*	10 +/-2 sec
	Curtain Application Viscosity*	18 +/-2 sec
	Solids by Weight, %, as supplied	29 +/-2
	Solids by Weight, %, ready to use	25 +/-2
	Pot Life, hours at 20°C/68°F	5-7

\* ASTM D1200 (Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	To handle:	1 hour
	To stack:	Over night

**TYPICAL SYSTEMS:** Substrate: Ash, Maple, Birch

**Open Grain Finish, Gloss**

TA0012/TX90	1 coat	120 gr/sq mt.(4.8 wet mils)
TP11/TX90	1 coat	120 gr/sq mt. (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 10 - 97 Revised 12-13, 8-15, 1-16, 5-16, 10-17

**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:** ILVALUX

**PRODUCT CODE:** TP 60

**DESCRIPTION:** Polyurethane gloss finish, clear

**USES:** Glossy finish for furnitures, mouldings, and caskets. High coverage and "wet-look" appearance.

<b>PRODUCT PREPARATION:</b>	TP60 Gloss Polyurethane Clear	<u>Parts by weight</u> 100	<u>Parts by volume</u> 128
	TX75 Curing Agent	100	128
	TZ13 Thinner (slow)*	40	40

\* Use TZ4223 in hot, humid weather

**APPLICATION SYSTEM:** Spray

**QUANTITY(grsq mt):** 140 - 160 (5.6-6.4 wet mils)

**COATS:** One or Two

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	.99 +/-0.05
	Viscosity*	50 +/- 2 sec
	Application Viscosity*	13 +/- 2 sec
	Solids by Weight, %, as supplied	50 +/- 2
	Solids by Weight, %, ready to use	35 +/- 2
	Pot Life, hours at 20°C/68°F	2

\* DIN 53211 mm 4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	Handling:	2 hours minimum
	Buffing:	24 hours minimum
	Topcoating with itself without sanding:	30 minutes minimum 3 hours maximum

<b>TYPICAL SYSTEMS:</b>	Substrate:	Various woods	
	PF 5 series	1 coat	40 gr/sq.mt. (1.6 wet mils)
	TF25/TV19	1 coat	40 gr/sq.mt. (1.6 wet mils)
	TG1323/TV72/TV802 - 3 coats		200 gr/sq.mt. per coat (8 wet mils)
	TP60/TX75	1 coat	120 gr/sq.mt. (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 5 - 02 Revised 12-13, 5-16, 10-17

**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 CODE:** TP 800

**DESCRIPTION:** CLEAR WET-LOOK 2K POLYURETHANE CONVERTOR FOR TINTOMETRIC

**USES:** Glossy deep tone color base for cabinets, furnitures, mouldings, caskets. High coverage and "wet-look" appearance. Intended to be tinted with PZ3xx color pastes.

<b>PRODUCT PREPARATION:</b>		<u>Parts by weight</u>	<u>Parts by volume</u>
TP800	Gloss Poly Tinting Convertor	100	128
TX75	Hardener*	60	80
TZ13	Thinner (slow)**	40-50	51
*or TX72 faster cure, slight effect on sheen		72	96
**Use TZ4223 in hot, humid weather			

**APPLICATION SYSTEM:** Spray

**QUANTITY(grsq mt):** 140 - 160 grs/sqmt) (5.6-6.4 wet mils)

**COATS:** One or Two

<b>GENERAL PROPERTIES:</b>		
Specific Gravity, gr/cc		1.00 +/- .02
Solid Content I component		53% +/-2%
Solid Content II component		34% +/-2%
Viscosity (Ford Cup 6) @20°C		34 sec +/-2 sec

<b>READY TO USE FEATURES:</b>		
Solid content I + II components		48% +/- 2%
Pot Life:		3 - 4 h @20°C / 68F
Viscosity (DIN 53211 mm4)@20°C		13 sec +/-2 sec

<b>DRYING TIME:</b> (at 20°C/68°F)		
Drying schedule at room temperature		24 hours minimum
Buffing:		48-72 hours for polishing /buffing
Time between coats without sanding		3-4 hrs

**TYPICAL SYSTEMS:**

Substrate: MDF or wood

Sealer (example 1) PI40/TV72/TV84 2-3 coats white polyester sealer.  
-24 h drying-sanding-150 gr/sqmt per coat (6 wet mils)

Sealer (example 2) PA20 or PA70 White or tinted (1 or 2 coats)

Sealer (example 3) TA48 tinted to color (1 or 2 coats)

Finish: TP800+PZ3xx series - one normal coat  
TP800+PZ3xx series - one normal coat then after waiting 3- 4 hours without sanding: apply 2nd coat. If outside the 4 hour window, must wait overnight, sand with 320, then apply 2nd coat. The product after minimum 48 hrs can be polished by light sanding/buffing + wax/ flexible + polish or only with polish. For the best polishing and filling results the most suitable sealer, especially if the substrate is MDF, is polyester, to be sanded with abrasive grain 280-320-400

If the first coat of TP800 is sanded, the second coat can be applied after 1 or more days. Dilution is very important to optimize the application result:

Curtain: dilute with TZ35 - during summertime and in case of high humidity it is recommended to use TZ35/TZ14 in a ratio of 70/30. Maintain viscosity between 16" and 25" (F4). Use Cuno filter 75 micron to optimize bubbles release

Spray: dilute with TZ13. During summertime and in case of high temperature, it is recommended to use TZ4223; during wintertime use a mixture of TZ13/TZ35.

**SHELF LIFE:** 18 months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 2-2016, Revised 5-16, 10-17

**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:**     **ACRIPOL**

**PRODUCT CODE:**     **TR1688**

**DESCRIPTION:**       **Unsaturated polyester finish, clear**

**USES:**                 Direct gloss polyester finish, suitable for assembled furniture, edges, frames, small furniture accessories. Excellent "wet look" for horizontal surfaces. Can be buffed to improve film appearance.

<b>PRODUCT PREPARATION:</b>		<u>Parts by weight</u>	<u>Parts by volume</u>
TR 1688 Direct gloss polyester finish		100	128
TV72 Accelerator		2	2
TV84 Catalyst		2	2
TZ86 or		10	12-16

**APPLICATION SYSTEM:**     Double component spray equipment is recommended.

**QUANTITY(grsq mt):**       150 - 200 per coat (6-8 wet mils)

**COATS:**                     One

<b>GENERAL PROPERTIES:</b>		
Specific Gravity, gr/cc		1.08 +/-0.05
Viscosity*		24 +/-2 sec
Application Viscosity*		13 +/-2 sec
Solids by Weight, %		86 +/-2
Pot Life, minutes at 2-°C/69°F		30-60

\*ASTN D1200(Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	Gel time:	25-30 minutes minimum
	Full curing (handling)	24 hours minimum

<b>TYPICAL SYSTEMS:</b>	Substrate:	Various woods
	TTF25/TV19                     1 coat	40 gr/sq mt (1.6 wet mils)
	TG1323/TV72/TV842-3 coats	150/200 gr/sq mt per coat (6-8 wet mils)
	TR1688/TV72/TV84         1-2 coats	150 gr/sq mt. (6 wet mils)
	Buffing optional	

**SHELF LIFE:**               One Year

**STORAGE:**                 Store in a tightly closed container at room temperatures (18-25°C/64-75°F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:**     12-00, Revised 12-13, 5-16

**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:**     **ACRIPOL**

**PRODUCT CODE:**     **TR 9982**

**DESCRIPTION:**       **Unsaturated polyester gloss finish**

**USES:**                 Direct gloss polyester finish, suitable for edges, chairs, small furniture and coffins.

<b>PRODUCT PREPARATION:</b>	TR9982 Polyester gloss finish	<u>Parts by weight</u> 100	<u>Parts by volume</u> 128
	TV72 Accelerator	1 - 2	2
	TV84 Catalyst	2	2
	TZ86 Thinner	20 - 30	32

**APPLICATION SYSTEM:**     Spray

**QUANTITY(grsq mt):**       120 per coat (4.8 wet mils)

**COATS:**                 One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.04 +/- 0.05
	Viscosity*	25 +/- 2 sec
	Application Viscosity*	15 +/- 2 sec
	Solids by Weight, %,as supplied	84 +/- 2
	Pot Life,minutes at 20°C/68°F	40 +/- 2

\* DIN 53211 #4 at 20°C/68°F

<b>DRYING TIME:</b> (at 20°C/68°F)	Gel time:	30 - 50 minutes minimum
	Full curing (handling)	24 hours minimum

<b>TYPICAL SYSTEMS:</b>	Substrate:	Various woods	
	TF25/TV19	1 coat	40 gr/sq mt (1.6 wet mils)
	TG1323/TV72/TV84	2-3 coats	150 gr/sq mt per coat (6 wet mils)
	TR9982/TV72/TV84/TZ86	1-2 coats	

**NOTES:**                 For this direct gloss TR9982, the polyester sealers are most suitable. If using a polyurethane sealer use those that give higher quality and good polymerization. For a good result we advise to use guns that will atomize the paint (holes not too big and high air pressure).  
The direct polyester gloss TR9982 can also be polished with the following procedure: light sanding with abrasive grain 1000-1200 - buffing with polishing cream and cleaning with polish.

**SHELF LIFE:**             One Year

**STORAGE:**             Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:**     03 - 97 Revised12-13, 5-16

**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:** ILVACRIL

**PRODUCT CODE:** TS000/SERIES

**DESCRIPTION:** Acrylic Urethane VOC/C Clear Finish

**USES:** Matte finish for acrylic systems, suitable for light colored wood such as maple, ash, birch, etc. Contains a UV inhibitor to resist yellowing. Low VOC formulation.

<b>PRODUCT PREPARATION:</b>		<u>Parts by weight</u>	<u>Parts by volume</u>
TS 000.../ Acrylic Urethane VOC/C Clear		100	128
TX1939 Hardener		20	26
TZ4223 or TZ13NH or TZ780 Thinner		10-20	30

**APPLICATION SYSTEM:** Airless, air-assisted, conventional spray, or curtain coater

**QUANTITY:** 120 - 140 per coat (gr sq mt) (4.8 - 5.6 wet mils)

**COATS:** One

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	0.93 +/- 0.05
	Viscosity*	31 +/- 2 sec
	Application Viscosity*, spray	15 +/- 2 sec
	Application Viscosity*, curtain coater	14 +/- 2 sec
	Solids by Weight, %, as supplied	24 +/- 2
	Solids by Weight, %, ready to use	25 +/- 2
	Pot Life, hours at 20°C/68°F	4

\* ASTM D1200 (Ford) #4 at 20°C/68°F

<b>DRYING TIME:</b>	To handle:	1 hour
(at 20°C/68°F)	To stack:	Over night

(at 50°C/122°F for 1 hour)	Handling and assembling:	Immediate, after cooling
----------------------------	--------------------------	--------------------------

<b>AVAILABLE GLOSSES:</b>	TS0001	65 Degrees
	TS0002	50 Degrees
	TS0003	35 Degrees
	TS0004	25 Degrees
	TS0005	15 Degrees
	TS1707	5 Degrees

**TYPICAL SYSTEMS:** Substrate: Ash ,Maple, Birch

**Open Grain Finish**

TA0012/TX1939	1 coat	120 gr/sq mt. (4.8 wet mils)
TS000/Series/TX1939	1 coat	120 gr/sq mt. (4.8 wet mils)

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 02-06, Revised 12-13, 8-15, 5-16, 10-17, 11-17

**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 CODE:** TS18

**DESCRIPTION:** **Acrylic-Urethane Ultra-Matte Clear Self-Sealer**

**USES:** Developed to obtain ultra-matte aesthetic look of natural wood. Contains UV inhibitor. Is suitable for panels, furniture, etc.

<b>PRODUCT PREPARATION:</b>		<u>Parts by weight</u>	<u>Parts by volume</u>
TS18 Acrylic Urethane Clear		100	128
TX90 or TX1939 Hardener		25	32
TZ4223 or TZ13NH or TZ780 Thinner		30-50	32

**APPLICATION SYSTEM:** Airless, air-assisted, conventional spray, or curtain coater

**QUANTITY:** 120-140 per coat (gr/sqmt) (4-6 wet mils)

**COATS:** Recommended to use as self-sealer. 1st coat, sanding , 2nd coat.

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	.910 +/- .030
	Viscosity (EN ISO 2431) ISO 6 cup	54 +/-4
	Viscosity (DIN 53211 mm4)	80 +/-5
	Application viscosity (DIN 53211 mm4)	15 +/-2
	*Viscosity at 20°C, 68°F	

<b>DRYING TIME:</b> (at 20°C/68°F)	Room temperature drying complete	18 h
	Dust Free	10 min
	Dry to touch	30 min
	Dry hard	18 h
	Stackable after room drying	12 h
	Sandable after	4 h
	Overcoatability time	24 h
	Overcoatability time between layers	1 h
	Maximum time between layers without sanding	3 h
	Hot air stages tunnel drying (20-40-60°C/68-104-140°F complete drying)	2 h
	Stackable after jet hot air drying	immediately

**AVAILABLE GLOSSES:** 4 Sheen (+/-2)

<b>TYPICAL SYSTEMS:</b>	<b><u>System #1</u></b>		
	Substrate:	various	
	Stain:	with or without stain	
	Sealer:	TS18	1 coat
	Finish:	TS18	1 coat
	<b><u>System#2</u></b>		
	Substrate:	various	
	Stain:	with or without stain	
	Sealer:	TE-UV Sealer	
	Finish:	TS18	1 coat

**SHELF LIFE:** 18 months from date of manufacture

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 06-13, Revised 12-13, 8-15, 5-16

**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 CODE:** TS168

**DESCRIPTION:** Acrylic-Urethane Velvet Diamond Finish

**USES:** Developed to obtain ultra-matte aesthetic look of natural wood. Contains UV inhibitor. Is suitable for panels, furniture, shelving, velvet touch and high scratch resistance.

<b>PRODUCT PREPARATION:</b>	<u>Parts by weight</u>	<u>Parts by volume</u>
TS168 Acrylic Urethane Clear	100	128
TX168 Hardener	30	30
TZ4223 or TZ13NH or TZ35Thinner	25	30

**APPLICATION SYSTEM:** Airless, airmix spray, conventional spray

**QUANTITY:** 100 - 120 per coat (gr sq mt)(4- 4.8 wet mils)

**COATS:** Recommended to use as final topcoat.

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc	1.060 +/- .030
	Viscosity* (Ford 6 Cup)	20 +/- 2 sec
	Application Viscosity, ISO 4 cup	50 +/- 4 secs
	Solids Content by weight, topcoat	51.7 +/- 2%
	Solids Content, by weight, mixed	54.7 +/- 2%
	Pot Life (Maximum)	4 hours

**DRYING TIME:** Room temperature (18-22°C/64-72°F) 65-7-% relative humidity (also dependent upon type of thinner used):

Dust free	4 min
Touch Dry	8 min
Hard Dry	24 hrs

**GLOSS LEVEL:** Gloss level 2 +/- 1

**TYPICAL SYSTEMS:**

<b>System #1</b>	
Substrate:	various woods
Stain:	with or without stain
Sealer:	Use standard polyurethane sealer, such as TA44 or TA48, or Clear Polyester Sealer TG1323. TA0012 Acrylic Sealer is NOT recommended
Topcoat:	TS168 Velvet Diamond 2K Acrylic Urethane
<b>System #2</b>	
Substrate:	various woods
Undercoat:	PA20 White Polyurethane Undercoat
Color Coat:	PL50 White Polyurethane to color
Topcoat:	TS168 Velvet Diamond 2K Acrylic Urethane

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 01-16, Revised 5-16, 10-16, 11-16, 10-17, 11-18

**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 CODE:** TSG5030

**DESCRIPTION:** CLEAR ACRYLIC WET-LOOK URETHANE

**USES:** Glossy finish for acrylic systems, suitable for light colored wood such as maple, ash, birch, etc. Contains a UV inhibitor to resist yellowing. Good filling properties. Can be buffed and polished.

<b>PRODUCT PREPARATION:</b>	<u>Parts by weight</u>	<u>Parts by volume</u>
TSG5030 Clear Acrylic Wet-Look Urethane	100	128
TX90 Acrylic Hardener	80	102
TZ13 or TZ4223 Thinner	30	34

**APPLICATION SYSTEM:** Airless, Air-Assisted, Conventional Spray, or Robot Spray

**QUANTITY:** 120 - 150 per coat (gr sq mt) (4.8-6 wet mils)

**COATS:** One or two

<b>GENERAL PROPERTIES:</b>	Specific Gravity, gr/cc:	.97 +/- .030
	Viscosity (EN ISO 2431) ISO 4 cup:	84 +/- 5
	Application Viscosity (DIN 43211 mm 4)	14 +/- 1
	Solids by weight, % as supplied:	42.5 +/- 2
	Solids by Wegiht, % ready to use:	36.9 +/- 2
	Pot Life, hours at 20°C/68°F (maximum):	3 hrs

<b>DRYING TIME:</b> (at 20°C/68°F)	Room temperature drying(18-22°C/64-72°F (65-70% relative humidity:	
	Dust Free	40 min
	Dry to touch:	120 min
	Hard Dry:	24 hrs
	Maximum time between layers wthout sanding:	3 hrs
	Buffing and polishing dependent upon drying conditions - 2-3 days min	

**TYPICAL SYSTEMS:** Substrate: Ash, Maple, Birch

**Open Grain Finish, Gloss**

TA0012/TX1939	1 coat	120 gr/sq mtr (4.8 wet mils)
TSG5030/TX90	1 coat	120 gr/sq mtr (4.8 wet mils)

**SHELF LIFE:** 18 months

**STORAGE:** Store in a tightly closed container at room temperatures (18-25°C/64-75°F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 01-16, Revised 4-16. 5-16

**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 CODE:** TS53/Series

**DESCRIPTION:** Techno Finish - Acrylic Transparent Topcoat

**USES:** High scratch resistance, surface hardness, and mar resistance. High resistance to heat and humidity. Ideal for kitchen cabinets, furniture and doors. Contains UV inhibitor.

	<u>Parts by weight</u>	<u>Parts by volume</u>
<b>PRODUCT PREPARATION:</b> TS53 Techno Acrylic Clear	100	128
TX90 or TX1939 Hardener	25	32
TZ4223 or TZ13NH or TZ780 Thinner	30-40	32

**APPLICATION SYSTEM:** Airless, air-assisted, conventional spray, or curtain coater

**QUANTITY:** 100 - 120 per coat (gr sq mt) (4-4.8 wet mils)

**COATS:** Recommended to use as a 1coat finish over sealers.

<b>GENERAL PROPERTIES:</b> Specific Gravity, gr/cc	0.919 +/- 0.02
Application Viscosity, CF 4	30 +/- 2 sec
Solids by Weight, %, as supplied	24 +/- 2
CFR 4 at 20°C/68°F	

<b>DRYING TIME:</b> To handle:	20 h by air
(at 20°C/68°F) Drying time in tunnel:	90' 40-50°C

<b>AVAILABLE GLOSSES:</b> TS531	65 Sheen (+/-3)
TS532	50 Sheen (+/-3)
TS533	35 Sheen (+/-3)
TS534	25 Sheen (+/-3)
TS535	15 Sheen (+/-3)
TS536	10 Sheen (+/-3)
TS537	5 Sheen (+/-3)

<b>TYPICAL SYSTEMS:</b>	
<b><u>System #1</u></b>	
Substrate:	various woods
Stain:	PF5 series, PG1 series, or water base stains
Sealer:	TA0012 Acrylic Sealer 1-2 coats
Topcoat:	TS 53/Series - Techno Finish Topcoat 1 coat
<b><u>System #2</u></b>	
Substrate:	various
Stain:	PF5 series, PG1 series, or water base stains
Sealer:	TA.. P/U Sealers or TG1323 P/E Sealer 1-2 coats
Topcoat:	TS 53/Series 1 coat

**SHELF LIFE:** 18 Months

**STORAGE:** Store in a tightly closed container at room temperatures (18 -25 °C/64 -75 °F) and protect from moisture and foreign material.

**DATE OF ISSUANCE:** 08-2015, Revised 5-16, 10-17

**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.

## PIGMENTED PASTES

Product code	Product description	Color	Maximum % combined color level allowed	Use	Notes
PZ 3 series	Pigmented pastes for polyurethane systems			Primers, sealers & finishes	For tinting sealers & finishes polyurethane base
PZ 330		White	20 - 30		
PZ 331		Vivid Yellow	20 - 30		
PZ 332		Gold Yellow	20 - 30		
PZ 333		Yellow oxide	20 - 30		
PZ 335		Wisteria Red	20 - 30		
PZ 336		Red Oxide	20 - 30		
PZ 337		Bordeaux	20 - 30		
PZ 338		Blue	20 - 30		
PZ 339		Black	20 - 30		
PZ 340		Green	20 - 30		
PZ 341		Lemon Yellow	20 - 30		
PZ 344		Vivid Red	20 - 30		
PZ 347		Violet	20 - 30		
PZ355		Red Concentrate	20 - 30		
PZ361		Yellow	20 - 30		
PZ364		Orange	20 - 30		
PZ 6 & 850 series	Pigmented paste for polyester systems		5 - 10	TC & TG	For tinting sealers & finishes polyester based
PZ 60		White	10-15		
PZ63		Yellow Oxide	8-10		
PZ 65		Red	5-8		
PZ66		Red Oxide	8-10		
PZ67		Red Violet	5-8		
PZ68		Blue	5-8		
PZ 69		Black	5-8		
PZ6A		Orange	8-10		
PZ 6C		Gold Yellow	5-8		
PZ 6L		Lemon Yellow	10-15		
850-0980		Lead-Free Orange	8-10		
850-1040		Red Oxide	8-10		
850-1840		Yellow Oxide	8-10		
850-7240		Phthalo Blue	5-8		
850-9440		Quinacridone Violet	5-8		

# **ILVA**

## **TROUBLESHOOTING TIPS**

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

## **COMMON PROBLEMS AND THEIR SOLUTIONS WHEN USING POLYURETHANE COATINGS**

### **BLUSHING**

Blushing generally may occur during hot, humid weather with polyurethanes. Should it appear under extreme conditions, it can be remedied by adding a small amount of TZ 418 to the coating to slow the dry time.

### **BUBBLES AND BLISTERS**

This would normally occur during hot weather. They may be caused by a porous substrate that has not been sufficiently sealed with a proper washcoat or sealer. Other common causes are: material drying too fast, material too heavily applied, insufficient air atomization, or excessive air movement. To correct insufficient atomization, increase your air pressure. Too heavy a coat can be corrected by reducing viscosity with TZ 13 or TZ 14. Drying too fast can be corrected by adding a small amount of TZ 418 as a retarder.

### **FLOW AND LEVELING / FISHEYES**

A 1% addition of PX 27 Leveling Aid/Fisheye remover will eliminate problems such as orange peel and craters (fisheyes). Orange peel can also be caused by the application pressure being too high. The other problems associated with flow and leveling can be corrected by the use of TZ 14 to reduce the viscosity and slow the drying time.

### **POLYURETHANE THINNERS**

Many application problems and poor finish results are due to the use of the wrong polyurethane thinner. Use recommended thinners only, i.e., TZ 13, TZ 14, TZ 33, TZ 35. No-HAPS thinners are available for all systems.

Many of the thinners that are available in the market today are intended for machinery and equipment clean-up or automotive refinishing. They are usually very strong solvents and evaporation is far too fast to obtain the necessary flow and leveling required for fine polyurethane finishes. Strong solvents will often bleed stains, lift finishes, draw out subsurface contaminants and cause many unnecessary problems with marginal equipment or application technique.

### **VARIATIONS OF SHEEN**

Every batch of ILVA's polyurethane is checked to be sure gloss is within our specifications. Variations of sheen are possible when using different thinners (evaporation rates), different hardeners (type or %), change of application equipment, or dramatic changes in temperature. Additionally change of sheen would normally occur when the material is insufficiently agitated. Semi-gloss polyurethanes and those of lower sheens should be stirred, and then agitated a minimum of ten minutes. Most low sheen finishes require 12 - 24 hours air dry to develop their sheen even though the surface may feel dry.

## **POLYURETHANE COMMON PROBLEMS (continued)**

### **SURFACE PREPARATIONS**

Smooth finish on wood starts with a clean, smooth, sanded surface free of dirt, oil, grease or any foreign material that would not be compatible with a polyurethane finish. Pre-finish sanding is usually done with 100-150-180 grit cabinet paper. Always sand with the wood grain and remove sanding dust from the surface before finishing.

Contaminates in the wood pores or spray equipment, such as silicone or sizing oils, will occasionally cause uneven drying or craters (fisheyes) in stains or finish coats. Anti-cratering additives (Fish Eye Remover) is the usual method for correcting these problems. Use PX 27 up to 1% of total coating to remedy fisheyes.

### **DRY TIMES**

Optimum ambient drying conditions are 68° F - 75° F. Product will not cure properly below 55° F. Improper curing may result in loss of adhesion, flaking, or peeling.

### **DRY TIME AND USE OF STAINS**

All oil base or synthetic stains should be allowed to dry at least 24 hours before applying a polyurethane product. Solvents such as mineral spirits and naphtha in oil stains are not compatible with polyurethanes, and must be completely dried out of the stain before a polyurethane is applied. Solvent type spray stains may be recoated sooner, however, testing at your location with your stain is recommended for proper recoat compatibility. For best results Acrylic-Urethane is recommended over white or pastel colored stains.

### **CLEAN UP**

Cleaning of spray equipment with acetone must be done as soon as possible after application of coating. Use of TZ03 is the recommended thinner.

### **DISPOSAL**

Unused polyurethane must be disposed of in the proper manner and in accordance with applicable local, state, and federal laws.



## **COMMON PROBLEMS AND THEIR SOLUTIONS WHEN USING POLYESTER COATINGS**

### **SPECIAL HANDLING PRECAUTION**

The accelerators (TV-72 &TV-62) and the catalysts (TV-80 & TV-84) are not stable when mixed solely with one another. This will cause an explosive fire hazard. Never mix these products directly with one another. Carefully follow mixing procedures for each product. Stir well before each step.

### **BLUSHING**

Blushing is a very rare problem with polyester coatings and can only happen if excessive quantities of product are applied. Refer to the product data sheet for the recommended film thickness. Spray applications of multiple coats (wet-on-wet) of polyester will allow good film build with no sags, using the proper techniques. The use of the barrier coat (TF 25 is very important to ensure the desired finish results.

### **BUBBLE AND BLISTER**

Usually related to hot weather and fast drying times. The nature of polyesters are not usually affected by the hot weather and are formulated to dry at specific rates. Correct measurements of the accelerator (TV 72) must be maintained.

### **CRATERING AND CRAWLING**

Generally caused by contamination of the surface by oil or silicone. If better cleaning of the surface does not cure the problem, an addition of PX 1369 at a .5% to 1.0% level will usually solve the problem in Direct Gloss Polyesters. Use PX9562 for fisheyes in TG1323 Polyester Sealer at .2 - .3% level.

### **THINNERS**

Many application problems and poor finish results are due to the wrong polyester thinner. Use only TZ 03 thinner for thinning polyester sealer and clean up. TZ 86 should be used for thinning polyester topcoat and may be used in hot weather.

Many of the thinners that are available in the market today are intended for machinery and equipment clean-up or automotive refinishing. They are usually very strong solvents and evaporation is far too fast to obtain the necessary flow and leveling required for fine polyester finishes. Strong solvents will often bleed stains, lift finishes, draw out subsurface contaminants and cause many unnecessary problems with marginal equipment or application technique.

### **DRY TIMES**

Optimum ambient drying conditions are 68°F - 75° F. Product will not cure properly below 60° F. Improper curing may result in loss of adhesion, flaking, or peeling.

## **SURFACE PREPARATIONS**

Smooth finish on wood starts with a clean, smooth, sanded surface free of dirt, oil, grease or any foreign material that would not be compatible with a polyester finish. Pre-finish sanding is usually done with 100 - 150 grit cabinet paper. Always sand with the wood grain and remove sanding dust from the surface before finishing.

Contaminates in the wood pores or spray equipment, such as silicone or sizing oils, will occasionally cause uneven drying or craters (fisheyes) in stains or finish coats. Anti-cratering additives (Fish Eye Remover) is the usual method for correcting these problems. Use PX 1369 at .5 to 1.0% of total Direct Gloss Polyester Coating to remedy fisheyes. Use PX9562 at .2 - .3% in TG1323 Polyester Sealer.

## **DRY TIME AND USE OF STAINS**

All oil base or synthetic stains should be allowed to dry at least 24 hours before applying the barrier coat (TF 25). Solvents such as mineral spirits and naphtha in oil stains are not compatible with polyesters, and must be completely dried out of the stain before a polyester is applied. Solvent type spray stains may be recoated sooner, however, testing at your location with your stain is recommended for proper recoat compatibility. Once again, it is crucial to use the barrier coat (TF 25), before applying the polyester coating. For best results Acrylic Urethane is recommended over white or pastel colored stains.

## **CLEAN UP**

Cleaning of spray equipment with acetone must be done as soon as possible after application of coating. Use of TZ 03 is the only recommended thinner.

## **DISPOSAL**

Any unused catalyzed polyester must be disposed of in accordance with applicable local, state, and federal regulations. Unused catalyzed polyester may be poured into a paper cup, allowed to stand until the material becomes very thick or semi-gelled. Then place the cup into a bucket of water and dispose of in accordance with applicable local, state, and federal laws.

# **ILVA**

## **BUFFING & POLISHING TIPS**

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

# **BUFFING AND POLISHING TIPS** **FOR ILVA HIGH PERFORMANCE** **POLYESTER AND POLYURETHANE FINISHES**

To have an excellent buffed and polished finish, it is extremely important to select the correct type of coating, sanding paper, pastes-wax and polish. The best results will be achieved on substrates that have been coated and sanded following the finishing cycles set out in the ILVA handbook.

An additional important factor that will influence the final effect of polishing is the degree of hardness of the coating film. Uncured coatings will tend to lift or move on the wood during polishing. This lifting of the film surface is a result of heat generated by the friction from the buffing rolls or the rotating pads, and can produce a "waved" effect or a dullness in the film after polishing.

Dry times will vary depending on the ambient temperature at the time of spraying or coating. Drying times also deviate depending on seasonal temperatures (i.e., longer drying times during the winter months and shorter drying times during the summer months). The optimum amount of air dry time of the film prior to buffing is 48-72 hours. Curing times can also be considerably reduced in industrial cycles by using an oven or forced hot air.

IC&S customers have had excellent results buffing our ILVA products using the Menzerna line of compounds listed below.

**Never use large or course grain sanding paper (i.e. 120-180 grit) on any sealer or topcoat.** The higher the quality and grain of sanding paper used in the initial sealer sanding, the better the result will be after buffing and polishing. If course paper is inadvertently utilized on sealer coats, sanding on later coats of material with fine paper, will not eliminate the "scratch" or "swirl" marks made during improper initial sealer sanding. These marks will always show through topcoats and buffing and polishing will tend to accentuate them. ILVA sealer coats are specially formulated to powder and sand with 320 then 400 paper which helps to achieve beautiful high gloss finishes.

**"Manual polishing"**, utilizing hand buffers or pads, is suitable for small jobs or pre-assembled items which cannot be polished by automatic production line machinery. In this instance, on polyester film, a good quality abrasive (Indasa, 3M, Norton, for example), followed by a Menzerna M-1000 Heavy Cut Compound, and M-3000 Final Finish, in that order, are generally sufficient to remove all signs of scratches left by the sanding paper on the finished surface.

Obtaining the finest buffed/polished finish with polyurethane and polyester high gloss pigmented topcoats, requires use of ultra fine sandpaper just before buffing (i.e. 1000 grit or higher and then 1200). Menzerna has available M-TF125 Finishing Glaze to enhance gloss and mask imperfections.

**Waxed polyester coated surfaces:** Sand with 320 grit paper to remove the wax. The final finish is achieved by using 400-500-600 grit paper with a straight line sander at a right angle to the previous step of sanding. Should an ultra fine finishing be required, more sandings using 800 grit paper stepped up to 1500 or so may be necessary. Menzerna has available M-1000 Heavy Cut Compound, M-3000 Final Finish and M-TF125 Finishing Glaze, used in order listed, to enhance gloss and mask imperfections.

**Direct gloss polyesters** (without paraffin wax) should be sanded using a finer grain abrasive paper 1000-1200-1500 grit, at a right angle to the previous step, then buffed using M-1000 Heavy Cut Compound, M-3000 Final Finish, and M-TF125 Finishing Glaze, in noted order, to enhance gloss and mask imperfections.

**Polyurethane painted surfaces:** Sand using 1000-1200-1500 grit paper and always sand at a right angle to the previous step. Then the same buffing compounds and procedure should be used as noted above under Direct gloss polyester.

**Dark polyurethane finishes:** To avoid a "whitening effect" which is caused by the use of pastes and waxes that are too abrasive, it is necessary to take particular care when sanding and buffing. Menzerna recommends using M-1000 Heavy Cut Compound, M-3000 Final Finish and, as a final step, M-TF125 Finishing Glaze can be used to enhance gloss and mask imperfections.

**Never use silicon sanding paper to sand sealer.** The failure to observe this fundamental rule may result in "fisheyes", adhesion and flow out problems with all finishes. Silicon based pastes, sanding paper, and polishes are intended for use in the automotive

IC&S customers have had excellent results buffing and polishing our ILVA products using the MENZERNA line of compounds listed below.

## **MENZERNA POLISHING COMPOUNDS**

### **Solid Bar Buffing Compounds**

M-W-18	Yellow medium polish compound for removing 800-1000 grit sanding marks
M-W-16	Tan fine burnishing wax compound for removing 1000 grit sanding marks
M-WG-15B	Similar to W16, black for dark colors
M-WATOL6	Tan very fine polishing compound for high gloss buffing

### **Liquid Compounds and Polishes**

M-1000	Heavy Cut Compound. Removes 1000-1500 grit sanding marks
M-3000	Final Finish. Eliminates light scratches and swirl marks.
M-TF125	Finishing Glaze. Enhances gloss and masks imperfections.

# ILVA

## HIGH PERFORMANCE WOOD FINISHES

### Proper Care

**ILVA/IC&S** has been creating and selling premium quality wood finishes for over 75 years. This fine cabinetry has been finished with one of our products that is the result of the latest technology and our approach to contemporary lifestyle solutions. Cared for properly, this finish will remain beautiful and functional for many years.

### *Proper Care*

**Remove Dust.** Dust is made up of small, airborne particles which can build up and may scratch or dull the surface if not removed correctly. Simply wipe the surface with a cloth dampened with a cleaning polish or mild detergent.

**Clean.** Oil from fingerprints, cooking fumes, smoking residue and other contaminants accumulate on any finished surface. None of these contaminants will harm our finish but should be periodically removed to restore the finish to its original luster. Just wipe the surface with a cloth dampened with a polish that doesn't contain wax. As an alternative you can use a cloth with a mild detergent solution. Ammonia or alcohol base cleaners are not recommended. Use of ammonia-based products and silicone oils may cause damage if used over a long period.

This finish is durable, but spills should be cleaned promptly. Also, excessive exposure to direct sunlight, high temperatures and high humidity can cause damage to the finish and wood itself.

# INDEX

## B

Buffing & Polishing 75-77

## P

Pigmented Pastes 69

Proper Care 78

## Products:

PA 20 28

PA 39 29

PA 70 30

PD 3/93 31

PF 5/series 32

PG 1/series 33

PI 29 34

PI 40 35

PL 50 36

PL 59 37

PL 80 38

PL800 Series 39

PM 10 40

PM 19 41

PM 80 42

PU1252 43

PX 70 44

PX 71 45

PZ3xxSeries 46

TA 03 47

TA0012 48

TA 44 49

TA48 50

TB14 51

TC 10 52

TC 11 53

TF1525 54

TF 25 55

TG 1323 56

TO 9/series 57

TO975/series 58

TP 11 59

TP 60 60

TP800 61

TR 1688 62

TR 9982 63

TS 000/series 64

TS18 65

TS168 66

TSG5030 67

TS5/Series 68

## Systems

Acrylic/Polyurethane Open-Pore System 8

Acrylic Urethane Velvet Diamond Finish 9

Bar Tops and Table Tops 23

Black Polyester Closed Pore Matte System 21

Black Polyester Closed Pore System (High Gloss) 22

Clear Polyester - Gloss Wet Look System 12

Clear Polyester - Gloss Wet Look System 13

Clear Polyurethane Hi-Build System 6

Clear Polyurethane Hi-Build System w/Ultra

Clear Sealer 5

Clear Polyurethane Open-Pore System

(various sheens) 4

Clear Polyurethane Table Top System 10

Clear Polyurethane - Wet Look System 11

Closed Pore Ultra Non-yellowing Gloss White System

MDF Applications 20

Closed Pore Ultra Non-yellowing Matte White MDF\

Application 19

HAPS Compliant Clear Polyurethane

Hi-Build System 7

Matte White Ultra Non-yellowing System 15

Open and Closed Pore Gloss White Ultra

Non-yellowing System 16

Pearlescent Acrylic Urethane Finish 24

Pigmented Polyurethane Open Pore Finish 14

White Polyester Closed-Pore System (High Gloss) 18

White Polyester Closed-Pore System (Matte) 17

## T

Table of Contents 2

Thinner Chart 26

Trouble Shooting 70-74

TX Polyurethane Hardener Chart 25