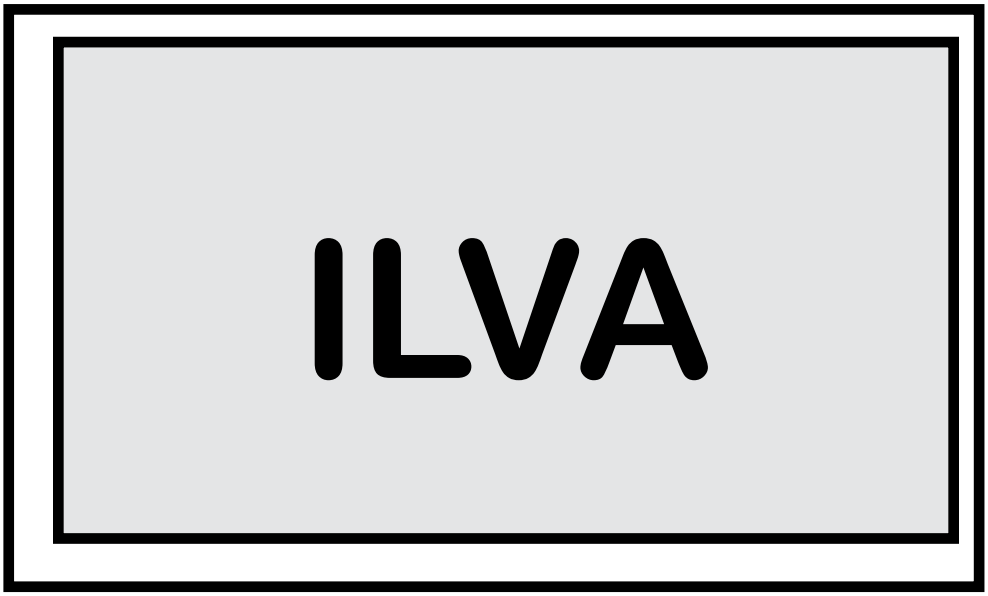


# HIGH PERFORMANCE INDUSTRIAL WOOD COATINGS

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# INDUSTRIAL COATINGS

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

Step 1: *Polyurethane Sealer*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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-Complaince

**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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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-Complaince

**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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| TA48 | Polyurethane Sealer | 100 | 128 |
| TX11* | 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| TO9/series | Polyurethane Finish | 100 | 128 |
| TX24* | 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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)*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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 neccesary 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)*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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:** *Polyurethane Sealer*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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-Complaince

**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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| TS168 | Acrylic Urethane Clear | 100 | 128 |
| TX168 | Hardener | 30 | 30 |
| TZ4223 or13NH | 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**

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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**

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| TG1323 | Clear polyester undercoat | 100 | 128 |
| TVS5AA1* | Accelerator | 2 | 2 |
| TZ03 | Thinner | 10 | 15-30 |
| Note: Mix extremely well before adding catalyst | | | |
| TV84 | Catalyst | 2 | 2 |

* Use 1 part TVS5AA1 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**

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| TG1323 | Clear polyester undercoat | 100 | 128 |
| TVS5AA1* | Accelerator | 2 | 2 |
| TZ03 | Thinner | 10 | 15-30 |
| Note: Mix extremely well before adding catalyst | | | |
| TV84 | Catalyst | 2 | 2 |

* Use 1 part TVS5AA1 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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 neccesary 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| TG1323 | Clear polyester undercoat | 100 | 128 |
| TVS5AA1* | Accelerator | 2 | 2 |
| TZ03 | Thinner | 10 | 15-30 |
| Note: Mix extremely well before adding catalyst | | | |
| TV84 | Catalyst | 2 | 2 |

* Use 1 part TVS5AA1 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| TR9982 | Clear Polyester Finish | 100 | 128 |
| TVS5AA1 | 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 neccesary 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| TG1323 | Clear polyester undercoat | 100 | 128 |
| TVS5AA1 | 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| TR1688 | Clear Polyester Finish | 100 | 128 |
| TVS5AA1 | 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 neccesary 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| PAS901 | White polyurethane primer | 100 | 128 |
| TX24* | Hardener | 50 | 90 |
| TZ33 | Thinner | 10-20 | 30 |
| *UseTX19 for better elasticity | | 40 | 71 |

**Pot life:** 2 hours
**Dry to handle:** 30-40 minutes
**Recoat:** 30 minute minimum to 3 hour maximum without sanding
**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 20 hours, sand the primer with 320 paper, blow the residue from the panel, then apply the second coat of primer. Allow 20 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)*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| PM800 | 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 neccesary 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)*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| PAS901 | White polyurethane primer | 100 | 128 |
| TX24* | Hardener | 50 | 90 |
| TZ33 | Thinner | 10 - 20 | 30 |
| *UseTX19 for better elasticity, | | 40 | 71 |

**Pot life:** 2 hours
**Dry to handle:** 30-40 minutes
**Recoat:** 30 minutes minimum to 3 hours maximum without sanding
**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 20 hours, sand the primer with 320 paper, blow the residue from the panel, then apply the second coat of primer. Allow 20 hours cure time before sanding and top coating.
**Tip size:** 1.8
**Air pressure:** 35 lbs

**Step 2:** *White Acrylic Finish High Gloss*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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 neccesary 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| PI40 | White polyester undercoat | 100 | 128 |
| TVS5AA1* | Accelerator | 2 | 2 |
| TZ03 | Thinner | 10 | 32 |
| Note: Mix extremely well before adding catalyst | | | |
| TV80 or TV84 | Catalyst | 2 | 2 |

* Use 1 part TVS5AA1 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| PL50 | White Polyurethane | 100 | 128 |
| TX75 | Hardener | 40 | 50 |
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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 s, 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| PI40 | White polyester undercoat | 100 | 128 |
| TVS5AA1* | Accelerator | 2 | 2 |
| TZ03 | Thinner | 10 | 32 |
| Note: Mix extremely well before adding catalyst | | | |
| TV80 or TV84 | Catalyst | 2 | 2 |

* Use 1 part TVS5AA1 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| PM800 | 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 neccesary 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| PI40 | White polyester undercoat | 100 | 128 |
| TVS5AA1* | Accelerator | 2 | 2 |
| TZ03 | Thinner | 10 | 32 |
| Note: Mix extremely well before adding catalyst | | | |
| TV80 or TV84 | Catalyst | 2 | 2 |

* Use 1 part TVS5AA1 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| PI40 | White polyester undercoat | 100 | 128 |
| TVS5AA1* | Accelerator | 2 | 2 |
| TZ03 | Thinner | 10 | 32 |
| Note: Mix extremely well before adding catalyst | | | |
| TV80 or TV84 | Catalyst | 2 | 2 |

* Use 1 part TVS5AA1 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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 neccesary 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| PI29 | Black polyester undercoat | 100 | 128 |
| TVS5AA1* | Accelerator | 2 | 2 |
| TZ03 | Thinner | 10 | 20 |
| Note: Mix extremely well before adding catalyst | | | |
| TV84 | Catalyst | 2 | 2 |

* Use 1 part TVS5AA1 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| PI29 | Black polyester undercoat | 100 | 128 |
| TVS5AA1* | Accelerator | 2 | 2 |
| TZ03 | Thinner | 10 | 20 |
| Note: Mix extremely well before adding catalyst | | | |
| TV84 | Catalyst | 2 | 2 |

* Use 1 part TVS5AA1 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:** *Polyester Gloss Finish*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| PE1025 | Gloss Black Polyester | 100 | 128 |
| TVS5AA1 | Polyester Accelerator | 2 | 2 |
| TZ86 | Polyester Thinner | 20 | 32 |
| Note: Mix extremely wll before adding catalyst | | | |
| TV84 | Catalyst | 2 | 2 |

**Pot life:** 3-4 hours
**Dry to handle:** 1 hour
**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 the 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

# Bar Tops and Table Tops

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

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

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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.*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| TC11 | Clear Polyester | 100 | 128 |
| TVS5AA1* | Accelerator | 2 | 3 |
| TZ80 | Thinner - Styrene | 10 | 15 |
| TV80 | Catalyst | 2 | 2 |

* Use 1 part TVS5AA1 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 Acrlyic Urethane Finish

**Step 1:** *Polyester Undercoat*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| PI40 | White polyester undercoat | 100 | 128 |
| TVS5AA1* | Accelerator | 2 | 2 |
| TZ03 | Thinner | 10 | 32 |
| Note: Mix extremely well before adding catalyst | | | |
| TV80 or TV84 | Catalyst | 2 | 2 |

* Use 1 part TVS5AA1 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)*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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)*

| Product # | Component Description | Parts/Wt | Parts/Vol (Ounces) |
|---|---|---|---|
| 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 Sealers (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 |
| 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 |
| 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-Yelllowing, Very flexible, HAPS Complaint | Slow |
| TX168 | All Acrylic Urethane | Max. Non-Yelllowing, Very flexible, HAPS Complaint, 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 CODE:** **PA 39**

**DESCRIPTION:** **Black Polyurethane Undercoat**

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

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| PA39 Polyurethane Undercoat | 100 | 128 |
| TX19 Hardener | 40 | 66 |
| TZ33 Thinner | 10 - 20 | 15-25 |

**APPLICATION SYSTEM:** Spray

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

**COATS:** One or more

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 1.23 +/- 0.05 |
| Viscosity* | 22 +/- 2 sec |
| Application Viscosity** | 15 +/- 2 sec |
| Solids by Weight, %, as supplied | 65 +/-2 |
| Solids by Weight, %, ready to use | 54 +/- 2 |
| Pot Life, hours at 20°C/68°F | 4 |

* ASTM D1200 (Ford) #8 at 20°C/68°F
** ASTM D1200 (Ford) #4 at 20°C/68°F

**DRYING TIME: (at 20°C/68°F)**

| | |
|---|---|
| Dust Free | 20 minutes |
| Dry to touch | 50 minutes |
| Sandable | after 4 hours |
| Maximum time between layers wtihout sanding | 1-3 hours |
| Topcoating | 24 hours |

**TYPICAL SYSTEMS:**

| Substrate | | Various woods |
|---|---|---|
| **Chairs, matte** | | |
| PA39/TX19 | 1-2 coats | 120 gr/sq.mt. per coat (4.8 wet mils) |
| PL59/TX24 | 1 coat | 120 gr/sq.mt. (4.8 wet mils) |
| **Chairs, gloss** | | |
| PA39/TX19 | 1-2 coats | 120 gr/sq.mt. per coat (4.8 wet mils) |
| PM19/TX276 | 1-2 coats | 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, 7-20, 11-20, 12-20, 5-22

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

# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **PA70**

**DESCRIPTION:** **POLYURETHANE UNDERCOAT, WHITE**

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

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| PA70 | 100 | 128 |
| TX19 | 40 | 64 |
| TZ33 Thinner | 10 - 20 | 10 - 30 |

**APPLICATION SYSTEM:** Spray

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

**COATS:** One to four

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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 - two or three coats - 1 day drying-sanding-120 gr/sqmt/coat |
| Finish: | PL - white pgimented matt finish<br>PM - white pigmented glossy finish |

SYSTEM NR 2

| | |
|---|---|
| Substrate: | MDF |
| Sealer: | PA70 -two or three coats- 1 day drying-sanding-120 gr/sqmt per coat |
| Finish: | PL - white pigmented matte/satin 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, 7-20, 12-20

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

# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **PAS5AB3**

**DESCRIPTION:** **White Hi Hide 2K Poly Primer**

**USES:** Undercoat for polyurethane pigmented systems, suitable for furnitures in general.

**PRODUCT PREPARATION:**

| | | Parts by weight | Parts by volume (ounces) |
|---|---|---|---|
| PAS5AB3 White Hi Hide 2K Poly\ Primer | | 100 | 128 |
| TX 19 | Hardener | 30 | 64 |
| TZ 33 | Thinner | 10 | 19 |

**APPLICATION SYSTEM:** Spray

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

**COATS:** One or more

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 1.634 +/- 0.030 |
| Viscosity* | 30 +/- 3 sec |
| Application Viscosity** | 15 +/- 2 sec |
| Solids by Weight, %, as supplied | 72.3 +/- 2 |
| Solids by Weight, %, ready to use | 61.7 +/- 2 |
| Pot Life, hours at 20°C/68°F | 6 |

* ASTM DIN 53211 mm 8 at 20°C/68°F
** ASTM D1N53211 mm 4 at 20°C/68°F

**DRYING TIME: (at 20°C/68°F)**

| | |
|---|---|
| Dust Free | 10 minutes minimum |
| Dry to Touch | 20 hours minutes |
| Sandable after | 4 hours |
| Overcoat time | 12 hours |
| Overcoat between layers | 1 hour |
| Maximum time between layers without sanding | 4 hours |
| Complete drying at room temperature | 12 hours |

**TYPICAL SYSTEMS:**

| | | |
|---|---|---|
| Substrate: | Various woods | |
| Sealer: | PAS5AB3 | 1-2 coats |
| Finish | PL800 Series | 1-2 coats |

**SHELF LIFE:** 24 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:** 1-2023

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**
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# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **PAS901**

**DESCRIPTION:** **White Polyurethane Primer**

**USES:** Undercoat for polyurethane pigmented systems. High resin content with good shrink resistance and elasticity. Excellent under high gloss poly.

**PRODUCT PREPARATION:**

| | | Parts by weight | Parts by volume (ounces) |
|---|---|---|---|
| PAS901 | White Polyurethane Primer | 100 | 128 |
| TX 24 | Hardener | 50 | 90 |
| TZ 33 | Thinner | 10 - 20 | 30 |
| *Use TX19 for better elasticity | | 40 | 71 |

**APPLICATION SYSTEM:** Spray

**QUANTITY(grsq mt):** 130 - 150 per coat (4.5-5.2 wet mils)

**COATS:** One or more

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 1.35 +/- 0.03 |
| Viscosity* | 20 +/- 2 sec |
| Application Viscosity** | 20 +/- 2 sec |
| Solids by Weight, %, as supplied | 71 +/- 2 |
| Solids by Weight, %, ready to use | 55.5 +/- 2 |
| Pot Life, hours at 20°C/68°F | 2 |

* ASTM D1200 (Ford) #8 at 20°C/68°F
** ASTM D1200 (Ford) #4 at 20°C/68°F

**DRYING TIME: (at 20°C/68°F)**

| | |
|---|---|
| Dust Free | 10-15 minutes |
| Dry to touch | 30 minutes |
| Recoating with itself | 30 minutes minimum<br>3 hours maximum without sanding |
| Sandable | 4 hours |
| Sanding & Topcoating | 20 hours |

**TYPICAL SYSTEMS:**

| | | |
|---|---|---|
| **Gloss finish (white)** | | |
| PAS901/TX24 | 1 or 2 coats | 130 gr/sq.mt. per coat (4.2 wet mils) |
| PM800/TX75 | 1 coat | 150 gr/sq.mt. (6 wet mils) |
| **Matte finish (white)** | | |
| PAS901/TX24 | 1 or 2 coats | 130 gr/sq.mt. per coat (4.2 wet mils) |
| PL800 series/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:** 3-06-2023

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# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **PD 3/93**

**DESCRIPTION:** **Vehicle for wipe stains and glazes**

**USES:** Use as a vehicle for glaze and stain. Cabinets and assembled furniture.

**PRODUCT PREPARATION:** 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.

**APPLICATION SYSTEM:** Spray and wipe

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

**COATS:** One

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**DRYING TIME: (at 20*C/68*F)**

| | |
|---|---|
| Handling: | 16 - 24 hours |

**TYPICAL SYSTEMS:**

| | |
|---|---|
| Substrate | Various woods (walnut, ash, etc.) |

PD3/93/PL5series (24 hours drying)
TA series sealer
TO series finish

**NOTES:** 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.

**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 12-00, 5-16

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**
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# ILVA TECHNICAL DATA SHEET

**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: (at 20*C/68*F)**

| | |
|---|---|
| Handling and topcoating, solvent systems | 30 - 60 sec |
| 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:**

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

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

**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 Latest Revision 5-13, 5-16, 9-16, 7-20

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# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **PG 1/series**

**DESCRIPTION:** **Stains for spray, wipe and rollcoat applications**

**USES:** Pigment stain concentrates for maximum light fastness.

**PRODUCT PREPARATION:**

| | |
|---|---|
| PG 1/ser. Stain | 100 parts by weight |
| TZ33NH Thinner | 10 - 50 parts by weight |
| PF91 Vehicle | 5 - 25 parts by weight |

**Thinners selection:**

| | |
|---|---|
| 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. |

**APPLICATION SYSTEM:** Spray and wipe

**QUANTITY(grsq mt):** 10 - 30 (.4-1.2 wet mils)

**COATS:** One

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 1.00 +/- 0.05 |
| Viscosity* | 15 +/- 2 sec |

* ASTM D1200 (Ford) #4 at 20°C/68°F

**DRYING TIME:**
**(at 20°C/68°F)**
**(tunnel 60°C or IR oven)**

| | |
|---|---|
| Handling and topcoating: | 30 - 60 sec |
| Handling and topcoating: | 10 sec |

**COLORS AVAILABLE:**

| | |
|---|---|
| PG10 | White |
| PG11 | Yellow |
| PG13 | Yellow oxide |
| PG14 | Orange |
| PG15 | Red |
| PG18 | Blue |
| PG19 | Black |
| PG1/Z01 | Green |

**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 4-08, 5-16, 7-20

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**
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# ILVA TECHNICAL DATA SHEET

**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 finshes.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| PI29 Black polyester undercoat | 100 | 128 |
| TVS5AA1 Accelerator* | 2 | 2 |
| TV84 Long pot life catalyst | 2 | 2 |
| TZ03 Thinner | 5 - 15 | 20 |

**use 1 part TVS5AA1 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

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 1.27 +/-.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

**DRYING TIME: (at 20*C/68*F)**

| | |
|---|---|
| Gel time, between coats, minutes | 20-30 minimum |
| 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) |
| PI29/TVS5AA1/TV84 | 2 - 3 coats | 150/200 gr/sq.mt. per coat (6-8 wet mils) |
| PM19/TX276 | 2 coats | 150 gr/sq.mt. (6 wet mils) |
| **Matte Finish** | | |
| TF25/TV19 | 1 coat | 40 gr/sq.mt. (1.6 wet mils) |
| PI29/TVS5AA1/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:** 12 Months

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

**DATE OF ISSUANCE:** 06-10, Revised 12-13, 5-16, 7-20, 12-20, 5-22, 5-23

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**
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# ILVA TECHNICAL DATA SHEET

**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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| PI40 White Polyester Undercoat | 100 | 128 |
| TVS5AA1* Accelerator | 2 | 2 |
| TV84 Long pot life catalyst | 2 | 2 |
| TZ03 Thinner | 10-20 | 32 |

** Use 1 part TVS5AA1 in hot weather, 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

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**DRYING TIME: (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/TVS5AA1/TV84 | 2-3 coats | 150/200 gr/sq mt (per coat) (6-8 wet mils) |
| PM800/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/TVS5AA1/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:** 12 Months

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

**DATE OF ISSUANCE:** 03 - 97 Revised 12-13, 5-16, 7-20, 12-20, 5-23

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**
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# ILVA TECHNICAL DATA SHEET

## PRODUCT CODE: PI 64

## DESCRIPTION: White Styrene-Free Polyally Sealer

**USES:** Furniture, flat and shaped panels, shutters, doors and every kind of structure where a full-filled solution is required (matt or glossy)

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| PI64 White Styrene-Free Polyester Sealer | 100 | 128 |
| TVS5AA1* Accelerator | 2 | 2 |
| TV84 Long pot life catalyst | 2 | 2 |
| TZ03 Thinner | 10-20 | 32 |

** Use 1 part TVS5AA1 in hot weather, 2 parts in cold weather*

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

**QUANTITY:** 200- 250 per coat (gr sq mt) (8-10 wet mils)

**COATS:** 2 to 3

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 1.46 +/-0.02 |
| Viscosity, DIN 53211 #8 at 20°C/68°F | 21 +/- 2 sec |
| Application Viscosity* | 25-35 secs |
| Solids by Weight, % | 80 +/- 2 |
| Pot Life, hours at 20°C/68°F | 90 minutes |

*DIN 53211 mm 4 at 20°C/68°F

**DRYING TIME: (at 20*C/68*F)**

| | |
|---|---|
| Between coats, minutes: | 30 minimum |
| Between coats, hours: | 3 maximum |
| For sanding and topcoating, hours: | 24 minimum |

Best sanding results obtained by first using 220-280 grit and then sanding with 320-400

**TYPICAL SYSTEMS:** Substrate: MDF and Solid Woods

**Gloss Finish**

| | | |
|---|---|---|
| TF25/TV19 | 1 coat | 40 gr/sq mt |
| PI64/TVS5AA1/TV84 | 2-3 coats | 200/250 gr/sq mt (per coat) |
| PM800/TX75 | 1 coat | 150 gr/sq mt. |

**Matte Finish**

| | | |
|---|---|---|
| TF25/TV19 | 1 coat | 40 gr/sq mt |
| PI64/TVS5AA1/TV84 | 2-3 coats | 200/250 gr/sq mt (per coat) |
| PL50/TX75 | 1 coat | 150 gr/sq mt. |

**SHELF LIFE:** 12 Months

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

**DATE OF ISSUANCE:** 01-14, Revised 7-20, 12-20, 5-23

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**
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# ILVA TECHNICAL DATA SHEET

**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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| PL50 Polyurethane White Matte | 100 | 128 |
| TX75 Hardener (non-yellowing) | 40 | 64 |
| TZ13 Thinner | 15-30 | 30 |

**APPLICATION SYSTEMS:** Airless, air-assisted, conventional spray.

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

**COATS:** One

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 1.28 +/- 0.05 |
| Viscosity* | 85 +/- 2 sec |
| Application Viscosity*spray | 10 +/- 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/TVS5AA1/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, 7-20, 12-20, 5-23

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**
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# ILVA TECHNICAL DATA SHEET

**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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| PL59 Polyurethane matte finish | 100 | 128 |
| TX50 Hardener | 50 | 64 |
| TZ13 Thinner | 25 | 32 |

**APPLICATION SYSTEM:** Spray

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

**COATS:** One

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 1.00 - 1.26 |
| Viscosity* | 30 - 80 sec |
| Application Viscosity* | 15 +/- 2 sec |
| 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

**DRYING TIME: (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 |
| **Open pore** | | |
| 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, 7-20, 12-20

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**
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# ILVA TECHNICAL DATA SHEET

**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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| PL80 Acrylic-urethane matte finish white | 100 | 128 |
| TX90 Hardener | 25 | 40 |
| TZ13 Thinner* | 20 | 0-64 |

*Use TZ4223 in hot, humid weather

**APPLICATION SYSTEM:** Spray

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

**COATS:** One

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 1.16 +/- 0.05 |
| Viscosity* | 30 +/- 2 sec |
| Application Viscosity** | 15 +/- 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

**DRYING TIME: (at 20*C/68*F)**

| | |
|---|---|
| To handle: | 1 hour |
| To stack: | 24 hours minimum |

**AVAILABLE SHEENS:**

| | |
|---|---|
| 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/TVS5AA1/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, 5-20, 7-20, 12-20, 5-23

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

# ILVA TECHNICAL DATA SHEET

**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 assem bled furniture. Packed in 20 KG pails for use as tintometric system base or a stand-alond product.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| 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.

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

**COATS:** One

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 1.28 +/-0.05 |
| Viscosity* | 62 +/-3 sec |
| Application Viscosity* | 10 +/-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

**DRYING TIME: (at 20*C/68*F)**

| | |
|---|---|
| To handle: | 1 hour |
| To stack: | Over night |

**AVAILABLE SHEENS:**

| | |
|---|---|
| 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/TVS5AA1/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, 7-20. 12-20, 5-23

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**
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# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **PM 19**

**DESCRIPTION:** **Polyurethane gloss black topcoat**

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

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| PM19 Polyurethane gloss finish | 100 | 128 |
| TX276 Hardener | 100 | 128 |
| TZ13 Thinner (spray) | 50 | 25-50 |

**APPLICATION SYSTEM:** Spray, curtain coater

**QUANTITY(grsq mt):** 140 - 180 per coat (5.6-7.2 wet mils)

**COATS:** One

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 1.3 +/- 0.05 |
| Viscosity* | 25 +/- 2 sec |
| Application Viscosity**(spray) | 10 +/- 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

**DRYING TIME: (at 20*C/68*F)**

| | |
|---|---|
| To handle: | 2 hours |
| To stack: | 24 hours minimum |
| Buffing | 48 hours minimum |

**TYPICAL SYSTEMS:**

| | | |
|---|---|---|
| Substrate | | MDF |
| TF25/TV19 | 1 coat | 40 gr/sq.mt. (1.6 wet mils) |
| PI29/TVS5AA1/TV84 | 2 - 3 coats | 150/200 gr/sq.mt. (6-8 wet mils) |
| PM19/TX276 | 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, 7-20, 12-20, 5-22, 5-23

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**(800) 220-4035**

# ILVA TECHNICAL DATA SHEET

**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.

**PRODUCT PREPARATION:**

| | Partys by weieght | Parts by volume (ounces) |
|---|---|---|
| PM80 Acrylic-urethane gloss finish white | 100 | 128 |
| TX90 Non-yellowing curing agent | 50 | 84 |
| TZ13 Thinner | 20 - 40 | 64 |

**APPLICATION SYSTEM:** Spray

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

**COATS:** One or two

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 1.23 +/- 0.05 |
| Viscosity* | 85 +/- 2 sec |
| Application Viscosity*(spray) | 15 +/- 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 |

*ASTM D1200 Ford #4 Cup at 20°C/68°F

**DRYING TIME: (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 |

**TYPICAL SYSTEMS:**

| Substrate | | MDF |
|---|---|---|
| TF25/TV19 | One coat | 40 gr/sq.mt.(1.6 wet mils) |
| PI40/TVS5AA1/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, 7-20, 12-20, 5-23

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

# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **PM800**

**DESCRIPTION:** **Polyurethane White Gloss Finish**

**USES:** Polyuethane white gloss topcoats, suitable for MDF panels and assembled furniture. Packaged in 20 KG pails for use as tintometric sytem base or a stand-alone product.

| | | Parts by weight | Parts by volume (ounces) |
|---|---|---|---|
| **PRODUCT PREPARATION:** | PM800 Polyurethane White Gloss Finish | 100 | 128 |
| | TX75 Hardener | 80 | 128 |
| | TZ13 Thinner | 15-30 | 25-50 |

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

**QUANTITY:** 140-150 gr sq mt per coat (5-6 wet mils)

**COATS:** One

| | | |
|---|---|---|
| **GENERAL PROPERTIES:** | Specific Gravity, gr/cc | 1.20 +/- 0.03 |
| | Viscosity* | 35 +/- 2 sec |
| | Solids by Weight, %, as supplied | 71.4 +/- 2 |
| | Solids by Weight, %, ready to use | 40-45 +/-2 |
| | Pot Life, hours at 20°C/68°F | 3-4 |

* ASTM D1200 (Ford) #6 at 20°C/68°F

| | | |
|---|---|---|
| **DRYING TIME: (at 20*C/68*F)** | Dust Free: | 30 mins |
| | To handle: | 2 hours |
| | To stack: | 24 hours minimum |
| | Buffing: | 48-72 hours minimum |

| | | | |
|---|---|---|---|
| **TYPICAL SYSTEMS:** | TF25/TV19 | 1 coat | 40 gr/sq mt (1.6 wet mils) |
| | PI40/TV5AA1/TV84 | 2-3 coats | 150/200 gr/sq mt (6-8 wet mils) |
| | PM800/TX75 | 1 -2 coats | 120 gr/sq mt. (4.8 wet mils) |
| | PA70/TX19 | 2 coats | 140 gr/sq mt (5.6 wet mils) |
| | PM800/TX75 | 1-2 coats | 130 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:** 07-20, Revised 9-20, 12-20, 5-23

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

# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **PU1252**

**DESCRIPTION:** **Pearlescent Acrylic Urethane**

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

**PRODUCT PREPARATION:**

| | | Parts by weight | Parts by volume (ounces) |
|---|---|---|---|
| PU1252 | Pearlesecent Acrylic Urethane Finish | 100 | 128 |
| TX90 | Hardener (light colored finishes) | 20 | 26 |
| TZ4223 | Thinner | 20-30 | 20-30 |

**APPLICATION SYSTEM:** Spray

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

**COATS:** One

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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/TVS5AA1/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, 12-20, 5-23

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# 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**
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# 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**

# 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%

**AVAILABLE COLORS:**

| | |
|---|---|
| **PZ330** | White |
| **PZ331** | Vivid Yellow |
| **PZ332** | Gold Yellow |
| **PZ333** | Yellow Oxide |
| **PZ335** | Wisteria Red |
| **PZ336** | Red Oxide |
| **PZ337** | Bordeaux |
| **PZ338** | Blue |
| **PZ339** | Black |
| **PZ340** | Green |
| **PZ341** | Lemon Yellow |
| **PZ344** | Vivid Red |
| **PZ347** | Violet |
| **PZ355** | Red Concentrate |
| **PZ361** | Yellow |
| **PZ364** | 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**

# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **TA 03**

**DESCRIPTION:** **Polyurethane Clear Sealer**

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

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| 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, or Conventional Spray

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

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

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**DRYING TIME: (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, 10-20, 12-20

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**
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# ILVA TECHNICAL DATA SHEET

**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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| 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

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**DRYING TIME:**
**(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 rom temperatures (18-25°C/64-75°F) and protect from moisture and f foreign material

**DATE OF ISSUANCE:** 02-06, Revised 12-13, 8-15, 5-16, 12-16, 10-17, 7-20, 12-20

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**
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# ILVA TECHNICAL DATA SHEET

**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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| 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

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

**COATS:** Two

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/lt | 0.98 +/- 02 |
| Viscosity* | 66 +/- 2 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

**DRYING TIME: (at 20*C/68*F)**

| | |
|---|---|
| Handling: | 2 hours at room temperature or<br>1 hour hot air oven at 40-50°C |
| Sanding and topcoating | 24 hours minimum |

**TYPICAL SYSTEMS:**

| | | |
|---|---|---|
| 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, 7-20, 12-20

**IC & S, P.O. BOX 10845, LANCASTER, PA 17605**
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# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **TA 48**

**DESCRIPTION:** **Clear polyurethane undercoat**

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

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| TA48 Clear polyurethane undercoat | 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

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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, 7-20, 12-20

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

# 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

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

**COATS:** Up to three, maximum

**GENERAL PROPERTIES:**

| | | |
|---|---|---|
| Specific Gravity, gr/cc | .935 | +/-0.02 |
| Viscosity* | 18 | +/-3 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

**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. 7-20

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

# ILVA TECHNICAL DATA SHEET

**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.

**PRODUCT PREPARATION:**

| | | Parts by weight | Parts by volume (ounces) |
|---|---|---|---|
| TC10 | Paraffined Unsaturated Polyester | 100 | 128 |
| TVS5AA1 | Accelerator | 2 | 3 |
| TV80 | Peroxide Catalyst | 2 | 2 |

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

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

**COATS:** Three

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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) | 4 hours at 20°/68°F |
| Pot Life, accelerated pot (double accelerator quantity) | 24 hours at 20°C/68°F |

*Brookfield, spindle #5, cps at 20°C/68°F

**DRYING TIME:**
**(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 |

**TYPICAL SYSTEMS:**

| | | |
|---|---|---|
| Substrate | | Various woods |
| **Transparent system** | | |
| TF25/TV19 | 1 coat | 40 gr/sq.mt. (1.6 wet mils) |
| TC10/TVS5AA1/TV80 | 3 coats | 200 gr/sq.mt. per coat (8 wet mils) |
| Sanding and buffing | | |
| **Pigmented system** | | |
| TF25/TV19 | 1 coat | 40 gr/sq.mt.(1.6 wet mils) |
| TC10/PZ6../TVS5AA1/TV80 | 3 coats | 200 gr/sq.mt. (8 wet mils) |
| Sanding and buffing | | |

**SHELF LIFE:** 12 months

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

**DATE OF ISSUANCE:** 03 - 97 Revised 12-13, 5-16, 7-20, 12-20, 5-23

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

# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **TC 11**

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

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

**PRODUCT PREPARATION:**

| | | Parts by weight | Parts by volume (ounces) |
|---|---|---|---|
| TC11 | Paraffined unsat. polyester | 100 | 128 |
| TVS5AA1 | Accelerator | 2 | 3 |
| TV80 | Peroxide catalyst | 2 | 2 |

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

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

**COATS:** 2 or 3 minimum

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**DRYING TIME: (at 20°C/68°F)**

| | |
|---|---|
| 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 |

**TYPICAL SYSTEMS:**

| | | |
|---|---|---|
| Substrate | | Various woods |
| **Transparent system** | | |
| TF25/TV19 | 1 coat | 40 gr/sq.mt.(1.6 wet mils) |
| TC11/TVS5AA1/TV80 | 3 coats | 200 gr/sq.mt. per coat 8 wet mils) |
| Sanding and buffing | | |
| **Pigmented system** | | |
| TF25/TV19 | 1 coat | 40 gr/sq.mt.(1.6 wet mls) |
| TC11/PZ 6.../TVS5AA1/TV80 | 3 coats | 200 gr/sq.mt. per coat (8 wet mils) |
| Sanding and buffing | | |

**SHELF LIFE:** 12 Months

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

**DATE OF ISSUANCE:** 03 - 97 Revised 12-13, 5-16, 7-20, 12-20, 5-23

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

# 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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| TF1525 Polyurethane Barrier Coat | 100 | 128 |
| TV19 Accelerator | 5 - 10 | 8 |
| TZ35NH 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

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**DRYING TIME: (at 20*C/68*F)**

| | |
|---|---|
| Topcoating without sanding: | Minimum 2 hours<br>Maximum 4 hours |
| Sanding: | Must sand if not topcoated before 4 hours<br>It is best to wait 8 hours before sanding. |

**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:** 06-05, Revised 12-13, 5-16, 10-17, 7-20, 12-20

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

# 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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| 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

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**DRYING TIME: (at 20*C/68*F)**

| | |
|---|---|
| Topcoating without sanding: | Minimum 2 hours<br>Maximum 4 hours |
| Sanding: | Must sand if not topcoated before 4 hours<br>It is best to wait 8 hours before sanding. |

**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, 7-20, 12-20

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# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **TF 40**

**DESCRIPTION:** **Barrier Coat**

**USES:** Non-yellowing, limited wetting of substrates, does not change the natural appearance of light natural woods.

**PRODUCT PREPARATION:**

| | | Parts by Wt. | Parts by Volume (ounces) |
|---|---|---|---|
| TF40 | Polyurethane Barrier Coat | 100 | 128 |
| TX90 | Curing agent (optional) | 10 - 20 | 13-26 |
| TZ35 | Thinner | 10 - 30 | 13-38 |

The addition of TX90 improves adhesion and wetting

**APPLICATION SYSTEM:** Spray, roller

**QUANTITY(grsq mt):** 60 - 80 (spray)
10 - 20 (roller)

**COATS:** One to three, Minimum 30 minutes before recoating. Maximum 4 hours without sanding

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 0.90 +/- 0.05 |
| Viscosity* | 24 +/- 2 sec |
| Application Viscosity* | 15 +/- 2 sec (spray) |
| Solids by Weight, %, as supplied | 16 +/- 2 |
| Solids by Weight, %, ready to use | 13 +/- 2 |
| Pot Life, hours at 20°C/68°F (converted) | >12 |

*ASTM D1200 (Ford) #4 at 20°C/68°F

**DRYING TIME: (at 20°C/68°F)**

| | |
|---|---|
| Topcoating | 4 hours minimum before sealer |
| | Must sand if after 6 hours |

**TYPICAL SYSTEMS:**

| Substrate | | Light woods (maple, ash, birch etc.) |
|---|---|---|
| TF40/TX90 | 1 coat | 60 - 80 gr/sq.mt. |
| TA0012/TX90 | 1 coat | 120 gr/sq.mt. |
| TSx Series/TX90 | 1 coat | 120 gr/sq.mt. |

**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 1-06, 2-18, 7-20, 12-20

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# ILVA TECHNICAL DATA SHEET

**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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| TG1323 Clear Polyester Undercoat | 100 | 128 |
| TVS5AA1* Accelerator | 2 | 2 |
| TV84 Long Pot Life Catalyst | 2 | 2 |
| TZ03 Thinner | 5-10 | 15-30 |

* TVS5AA1 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:** Two to three

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**DRYING TIME: (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/TVS5AA1/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/TVS5AA1/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:** 12 Months

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

**DATE OF ISSUANCE:** 02 - 98 Revised 12-13, 5-16, 7-20, 12-20, 5-23

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**(800) 220-4035**

# ILVA TECHNICAL DATA SHEET

## PRODUCT CODE: TO800

## DESCRIPTION: NEUTRAL SATIN POLYURETHANE BASE

**USES:** Polyurethane neutral tint base used to made deep tone finish colors. See Page 72 for PZ3 colorants and acceptable tint loads.

**PRODUCT PREPARATION:**

| | | Parts by weight | Parts by volume (ounces) |
|---|---|---|---|
| TO800 | Neutral Satin Polyurethane Base | 100 | 128 |
| TX24* | Hardener | 50 | 64 |
| TZ13 | Thinner | 30 | 30 |

*TX50 for slightly faster cure and hardness.

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

**QUANTITY:** 130-160 per coat (gr. sq. mt.) (5.2-6.4 wet mils)

**COATS:** One

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 1.00 +/-0.030 |
| Viscosity* | 70 +/-5 sec |
| Solids by Weight, %, as supplied | 46.4 +/-2 |
| Solids by Weight %, catalyzed | 39 +/-2 |
| Pot Life, hours at 20°C/68°F | 3 hours |

*EN ISO 2431 Iso Cup 6 @20°C/68°F

**DRYING TIME:**

| | |
|---|---|
| Dust free: | 10 mins |
| Dry to touch: | 30 mins |
| To handle: | 12 Hours |

**AVAILABLE SHEENS:** TO800 20 Sheen

**TYPICAL SYSTEMS:**

| | | |
|---|---|---|
| Substrate: | Various woods | |
| Sealer: | Tomted polyrethane sealers or primers | 1- 2 coats |
| Finish: | TO800 Neutral Satin Polyurethane Base tinted to color | |

**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:** 07-20, 12-20

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

# 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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| TO9/series Polyurethane Clear Finish | 100 | 128 |
| TX24* Hardener | 50 | 64 |
| TZ13 Thinner | 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

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**AVAILABLE SHEENS:**

| | |
|---|---|
| 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, 7-20, 12-20

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

# 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:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| 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.

**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 |
| TO9757 | 5 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, 7-20, 12-20

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

# ILVA TECHNICAL DATA SHEET

**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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| TP11 Gloss Acrylic Urethane Clear | 100 | 128 |
| TX90 Hardener | 20 | 26 |
| TZ13 Thinner | 20-25 | 20-30 |

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

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

**COATS:** One

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 0.94 +/-0.05 |
| Viscosity* | 25 +/-2 sec |
| Application Viscosity* | 10 +/-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

**DRYING TIME: (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, 7-20, 12-20

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

# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **TP 60**

**DESCRIPTION:** **Polyurethane gloss finish, clear**

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

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| TP60 Gloss Polyurethane Clear | 100 | 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

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**DRYING TIME: (at 20*C/68*F)**

| | |
|---|---|
| Handling: | 2 hours minimum |
| Buffing: | 24 hours minimum |
| Topcoating with itself without sanding: | 30 minutes minimum<br>3 hours maximum |

**TYPICAL SYSTEMS:**

| 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/TVS5AA1/TV80 | 2 - 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, 7-20, 12-20, 5-23

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

# 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.

**PRODUCT PREPARATION:**

| | | Parts by weight | Parts by volume (ounces) |
|---|---|---|---|
| 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

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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 |

**READY TO USE FEATURES:**

| | |
|---|---|
| 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 |

**DRYING TIME: (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, 7-20, 12-20

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

# ILVA TECHNICAL DATA SHEET

**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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| TR 1688 Direct gloss polyester finish | 100 | 128 |
| TVS5AA1 Accelerator | 2 | 2 |
| TV84 Catalyst | 2 | 2 |
| TZ86 or | 10 | 12-16 |

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

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

**COATS:** One

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**DRYING TIME: (at 20*C/68*F)**

| | |
|---|---|
| Gel time: | 25-30 minutes minimum |
| Full curing (handling) | 24 hours minimum |

**TYPICAL SYSTEMS:** Substrate: Various woods

| | | |
|---|---|---|
| TTF25/TV19 | 1 coat | 40 gr/sq mt (1.6 wet mils) |
| TG1323/TVS5AA1/TV84 | 2-3 coats | 150/200 gr/sq mt per coat (6-8 wet mils) |
| TR1688/TVS5AA1/TV84 | 1-2 coats | 150 gr/sq mt. (6 wet mils) |
| Buffing optional | | |

**SHELF LIFE:** 12 Months

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

**DATE OF ISSUANCE:** 12-00, Revised 12-13, 5-16, 7-20, 12-20, 5-23

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

# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **TR 9982**

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

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

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| TR9982 Polyester gloss finish | 100 | 128 |
| TVS5AA1 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

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**DRYING TIME: (at 20*C/68*F)**

| | |
|---|---|
| Gel time: | 30 - 50 minutes minimum |
| Full curing (handling) | 24 hours minimum |

**TYPICAL SYSTEMS:**

| | | |
|---|---|---|
| Substrate: | | Various woods |
| TF25/TV19 | 1 coat | 40 gr/sq mt (1.6 wet mils) |
| TG1323/TVS5AA1/TV84 | 2-3 coats | 150 gr/sq mt per coat (6 wet mils) |
| TR9982/TVS5AA1/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 polis

**SHELF LIFE:** 12 Months

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

**DATE OF ISSUANCE:** 03 - 97 Revised12-13, 5-16, 7-20, 12-20, 5-23

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

# ILVA TECHNICAL DATA SHEET

## 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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| 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, or conventional spray.

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

**COATS:** One

**GENERAL PROPERTIES:**

| | |
|---|---|
| Specific Gravity, gr/cc | 0.93 +/- 0.05 |
| Viscosity* | 31 +/- 2 sec |
| Application Viscosity*, spray | 15 +/- 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

**DRYING TIME:**
**(at 20*C/68*F)**

| | |
|---|---|
| To handle: | 1 hour |
| To stack: | Over night |

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

**AVAILABLE GLOSSES:**

| | |
|---|---|
| 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, 7-20, 12-20

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

# ILVA TECHNICAL DATA SHEET

**PRODUCT CODE:** **TS18**

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

**USES:** Developed to otain ultra-matte aesthic look of natrual wood. Contains UV inhibitor. Is suitable for panels, furniture, etc.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| 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, OR conventional spray.

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

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

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**DRYING TIME:**
**(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 betweeen layers | 1 h |
| Maximum time betweeen layers wityhout 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)

**TYPICAL SYSTEMS:**

**System #1**

| | | |
|---|---|---|
| Substrate: | various | |
| Stain: | with or without stain | |
| Sealer: | TS18 | 1 coat |
| Finish: | TS18 | 1 coat |

**System#2**

| | | |
|---|---|---|
| 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, 7-20, 12-20

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

# 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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| TS168 Acrylic Urethane Clear | 100 | 128 |
| TX168 Hardener | 30 | 39 |
| TZ4223 or TZ13NH | 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.

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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: (at 20*C/68*F)** Room temperatture (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:** 2 +/- 1

**TYPICAL SYSTEMS:**

System #1

| | |
|---|---|
| Substrate: | various woods |
| Stain: | with or without stain |
| Sealer: | Use standard polyurethane sealer, such as TA44 or TA48, or Clear Polyster Sealer TG1323. TA0012 Acrylic Sealer is NOT recommended |
| Topcoat: | TS168 Velvet Diamond 2K Acrylic Urethane |

System #2

| | |
|---|---|
| Substrate: | various woods |
| Undercoat: | PA20 White Polyurethane Undercoat |
| Color Coat: | PL50 White Polyurethane to color |
| Topcoat | TS168 Vevet 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, 7-20, 12-20, 4-22

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

# 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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| 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

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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 |

**DRYING TIME: (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 wtihout 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, 7-20, 12-20

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

# 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.

**PRODUCT PREPARATION:**

| | Parts by weight | Parts by volume (ounces) |
|---|---|---|
| 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, or conventional spray.

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

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

**GENERAL PROPERTIES:**

| | |
|---|---|
| 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

**DRYING TIME:**
**(at 20*C/68*F)**

| | |
|---|---|
| To handle: | 20 h by air |
| Drying time in tunnel: | 90' 40-50°C |

**AVAILABLE GLOSSES:**

| | |
|---|---|
| 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) |

**TYPICAL SYSTEMS:**

**System #1**

| | | |
|---|---|---|
| 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 |

**System #2**

| | | |
|---|---|---|
| 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, 12-20

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

# 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 FOR POLYURETHANE AND ACRYLIC
0.5-1% 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 availiable 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 (evaporatin rates), different hardeners (type or %), change of application equipment, or dramatifc 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.

## 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 wil 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 accelerator (TVS5AA1) 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 (TVS5AA1) 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 my 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 palce 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 productrs 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 availabe 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 availabe 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 Compunds**

| | |
|---|---|
| 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. Elminates 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 contaminates 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 alter native 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.

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5/17/23