

## Working guideline for high gloss transparent coating

Achieving a high gloss finish requires special procedures. We recommend the following approach for achieving a high gloss clear finish:

### Substrate:

Unstained or stained hardwood or softwood. Not suitable for bleached surfaces.

### Wood sanding:

Rough grinding of softwood with grit size 120 – 150, hardwood with grit size 150 – 180t. Final sanding is carried out using an orbital sander:

- sandpaper grit size 220
- ca. 5 – 10 mm orbit
- ca. 10,000 – 12,000 rpm.

### Primer application:

Priming is carried out using ADLER PUR-Füllgrund HT 2530000200. Apply one preliminary coat by spraying. After approx. 1 hour drying at room temperature a second, not too heavy, coat is applied without intermediate sanding.

**Intermediate sanding of the primer coat** is carried out after drying overnight:  
use orbital sander

- sandpaper grit size 320-360
- 2.5 - 3 mm orbit
- ca. 10,000 – 12,000 rpm.

Ensure that surfaces are carefully and thoroughly sanded, i.e. the underlying paint surface is well sanded down. It is **essential not to sand through** the layer.

Depending on the type of wood and the desired optical properties (body), more layers are necessary. It is important to ensure that drying time between coats is always adequate and as long as possible. Please observe the respective technical data sheets of the products.

**The final intermediate sanding before applying top coat** is carried out as following:

- use orbital sander
- in steps grit size 280 – 360 – 500
- 2.5 - 3 mm orbit
- 10,000 – 12,000 rpm.

Sanding dust must be completely removed to achieve a high gloss surface: blow with compressed air, then wipe surfaces down with tack rag. This should be done shortly before applying the top coat so any dust from the surrounding atmosphere is also removed.

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## Topcoat

There are 2 options available for the top coat, using different paint systems:

Option 1:	Aduro PUR-Glanzlack	2632000100
Option 2:	ADLER Pigmotop G100	25370

### Option 1

Apply 2 coats of Aduro PUR-Glanzlack 2632000100 for high gloss surfaces with very good body and excellent gloss. An intermediate drying time of ca. 1 hour should be observed without sanding between coats.

Aduro PUR-Glanzlack contains an adequate amount of light stabiliser.

### Option 2

Apply 2 coats of ADLER Pigmotop G100 25370 for high gloss surfaces with good body and gloss and rapid drying. An intermediate drying time of ca. 3 hours should be observed without sanding between coats.

If required, 5 – 10 % ADLER Lichtschutzkonzentrat [light stabiliser] 90712 can be added to ADLER Pigmotop G100 25370.

Alternatively, for closed-pore high gloss surfaces, a multilayer coating system of PUR-Füllgrund HT is sandable and polishable to a high gloss level.

## Drying time before polishing or buffing:

After drying overnight Aduro PUR-Glanzlack 2632000100 can be sanded and polished or buffed as required.

After a minimum drying time of 3 days the surfaces coated with ADLER Pigmotop G100 25370 can be sanded and polished or buffed as required.

### A) Sanding and polishing method:

The polishing method requires initial sanding, wet or dry:

- using oscillating sander (rotary speed without load ca. 20,000 rpm) or orbital sander
- orbit 2.5 - 3 mm
- grit size 1200 – 2000

partly also by hand;

### **Water for wet sanding:**

The water used for wet sanding, containing a few drops of wetting agent such as Pril (Fa. Henkel Austria) or soap, can be applied with spray bottle.

After carefully removing the water or sanding dust the mat surfaces can be polished out in several steps:

**Preliminary polishing** is carried out using a coarse polishing paste. Preliminary polishing is carried out using

- a rotary polisher
- lamb's wool (ca. 1500 rpm).

Ensure the polishing paste is carefully removed before the next step.

**Final polishing** is carried out using a fine polishing paste:

- rotary polisher
- ca. 1,500 rpm
- foam disc

Residual polishing paste must be completely removed before the final step.

**Applying a protective wax:**

to increase scratch resistance on the polished high gloss surface, using a microfibre cloth.

To avoid scratch marks due to dried lumps, do not allow the protective wax to dry on the surface. Wipe off any excess protective wax with a microfibre cloth.

**B) Buffing method:**

The buffing method also requires sanding, wet or dry (see above). The subsequent steps are as following:

**Preliminary polishing using the buffing method** is carried out:

- using a belt sander
- wet belt sander with ADLER sanding liquid 80011
- apply coarse buffing wax by pressing.

Buffing is carried out at low speed (max. 11 m/sec) and only slight pressure to avoid excessive heating of the surface.

**Final polishing** is carried out using a fine polishing paste:

- using an angle sander
- ca. 3,000 rpm – backing pad with soft cover
- using a foam disc
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Ensure residual polishing paste is completely removed before final step.

**Applying a protective wax:**

to increase scratch resistance on the polished high gloss surface, using a microfibre cloth.

To avoid scratch marks due to dried lumps, do not allow the protective wax to dry on the surface. Wipe off any excess protective wax with a microfibre cloth.

**Please note the advice in the Technical Data Sheets and Safety Data Sheets of products described or alternative products you have chosen.**

**We recommend testing the whole system on the original substrate.**

## Manufacturer Information for Materials and Equipment

The products described are a selection of those on the market. All materials and grindings materials as well as polishing accessories are available at ADLER. Comparable products from other manufacturers can obviously be used but must be checked for suitability.

<b>Materials:</b>			
<b>Function</b>	<b>Product description</b>	<b>Manufacturer / Distributor</b>	<b>Other information</b>
Coarse polishing paste, silicone free	3M Perfect-it III Schleifpaste Plus  Available at ADLER with order number 9697701	3M / ADLER	Packing size 1 l
Fine polishing paste, silicone free	3M Extrafine Schleifpaste  Available at ADLER with order number 9697801	3M / ADLER	Packing size 1 l
Protective wax	3M Polish Rosa Hochleistungswachs (high performance wax)  Available at ADLER with order number 9697601	3M / ADLER	Packing size 1 l
Protective wax	3M Microfasertuch Grün (green cloth in microfiber)  Available at ADLER with order number 9697501	3M / ADLER	36 x 32 cm Packing size 5 pieces

<b>Machinery:</b>			
<b>Function</b>	<b>Product description</b>	<b>Manufacturer / Distributor</b>	<b>Other information</b>
Orbital sander	3M Exzenterschleifer Elite	3M  Fa. Thalhammer Farben GesmbH & Co KG Theresienthalstraße 3, A-4810 Gmunden <i>or:</i> Farben Hübner Villacher Straße 146 A-9800 Spittal an der Drau	Power consumption: 150 W  Range: 7.000 - 10.000 U/min; Grinding pass: 2 mm; Grinding disk-Ø: 125 bzw. 150 mm
Orbital sander	Festool ETS 150/3 EQ	Festool Österreich GmbH Schloss Glanegg 2 A-5082 Grödig	Power consumption: 310 W  Range: 8,000 - 21,000 rpm; Grinding pass: 3 mm; Grinding disk Ø: 150 mm
Polishing machine	3M Poliermaschine	3M  Fa. Thalhammer Farben GesmbH & Co KG Theresienthalstraße 3, A-4810 Gmunden <i>or:</i> Farben Hübner Villacher Straße 146 A-9800 Spittal an der Drau	Power consumption: 1.100 W Drive: 700-1.870 rpm; Polishing wheel-Ø: 200 mm

Rotary polisher	Festool Shinex RAP 150.03 E	Festool Österreich GmbH Schloss Glanegg 2 A-5082 Grödig	Power consumption: 1.200 W Drive: 600-1.400 rpm; Pad Ø: 150 mm
Angle sander for polishing	Makita Elektronik Rotary Polisher/Sander 9227 CB	Makita Werkzeug GmbH, Kolpingstr. 13 A-1232 Vienna, Austria	Speed without load: 600 – 3,000 rpm Power consumption: 1,200 W Grinding disk diameter: 180 mm
Angle sander for polishing	Dynabrade Model 53460	Dynabrade Austrian agent: Maringer Spezialwerkzeuge, A-8720 Knittelfeld, Austria	3,200 rpm; air operated for small surfaces and edges

<b>Equipment</b>			
<b>Function</b>	<b>Product description</b>	<b>Manufacturer / Distributor</b>	<b>Other information</b>
Polishing pad grit size 1000	3M Hookit flexible polishing pad  Available at ADLER with order number 968400030017	3M / ADLER	With hook-and-loop backup Ø = 150 mm Packing size: 25 pieces For wet/dry sanding
Polishing pad grit size 1500	3M Hookit flexible polishing pad  Available at ADLER with order number 968400030117	3M / ADLER	With hook-and-loop backup Ø = 150 mm Packing size: 25 pieces For wet/dry sanding
Polishing pad grit size 3000	3M Trizact polishing pad  Available at ADLER with order number 9697101	3M / ADLER	With hook-and-loop backup Ø = 150 mm Packing size: 25 pieces For wet sanding
Film disk roll	3M Trizact film disk roll  Available at ADLER with order number 9697901	3M / ADLER	Adhesive dots grit size 3000 on sheet Ø = 32 mm 100 dots / sheet Packing size: 1 sheet
Natural wool	3M Perfect-it III Pad Compound Foam  Available at ADLER with order number 9697201	3M / ADLER	With hook-and-loop backup machine polishing Ø = 150 mm Packing size: 2 pieces
Felt pad	3M Finesse-it Felt pad  Available at ADLER with order number 9697301	3M / ADLER	With hook-and-loop backup machine polishing Ø = 127 mm Packing size: 5 pieces
Napped foam polishing pad	3M Extra Life Polishing pad  Available at ADLER with order number 9697401	3M / ADLER	With hook-and-loop backup machine processing of the grinding pastes Ø = 133 mm Packing size: 2 pieces

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Our instructions are based on the current state of knowledge and provide the purchaser/user with advice to the best of our knowledge. They should, however, be adapted to the field of application and the working conditions as appropriate. The purchaser/user is responsible for deciding the suitability and use of the delivered product and is therefore advised to carry out tests to ensure suitability of the product. Our General Terms of Sale apply. With this issue, all previous information sheets are no longer applicable. We reserve the right to make changes to container sizes, colour shades and available gloss levels.