

NIPPON PAINT PU RECOATABLE CLEAR FINISH
Updated July'25

PU RECOATABLE CLEAR FINISH is a two-component, high build, aliphatic acrylic polyurethane coating, which is to be used as topcoat in atmospheric environments. It provides a durable gloss and colour retention topcoat finish, which also incorporates a wide range of performance characteristics. It offers good operational performance including adhesion, abrasion scratches, impact, humidity condensation and splashes of mild chemicals and gloss retention.

Product Features:

- Weathering durability, gloss and colour retention
- Non-yellowing and does not chalk easily
- Resistant to splashes of mild, non-aggressive chemicals
- Good application properties, flow and levelling
- Long recoatability property, can be recoated even after long exposure

Paint Type	Product Type	Finishing	Recommended Substrate	Pack Size
Solvent based	Interior / Exterior	Gloss / Satin*	Wood	1L & 5L

**Satin finishing only suitable for interior application*

Composition

Pigment	: Organic and inorganic pigments
Binder	: Acrylic polyol and aliphatic poly-isocyanate
Thinner	: Combination of glycol ether ester and hydrocarbon

Technical Data

Drying Time (25-30°C)	: Touch Dry : 2 hours (Dependent on temperature and humidity) : Hard Dry : 8 hours (Dependent on temperature and humidity)
Overcoating Time (25-30°C)	: Minimum 8 hours (Dependent on temperature and humidity)
Curing Time (25-30°C)	: 7 days (Dependent on temperature and humidity).
Typical Thickness	: 50 - 75 µm dry film per coat 80 - 125 µm wet film per coat
No. of Coats	: 1-2 coats
Theoretical Coverage	: 12.0 m ² per litre per coat (for dry film thickness of 50µm) : 8.0 m ² per litre per coat (for dry film thickness of 75µm)
Practical Coverage (40% Loss Factor, as a guideline)	: 7.2 m ² /litre (for dry film thickness of 50 microns) 4.8 m ² /litre (for dry film thickness of 75 microns)
Volume Solid	: 60 ± 2%
Specific Gravity	: 0.98 – 1.25 (for mixture of base and hardener)
Mixing Ratio	: 4 parts by volume of Base to 1 part by volume of Hardener. (Stir the content of the Base component, continue stirring and gradually add the total contents of the Hardener component, continue stirring until a homogeneous mix is obtained.)
Pot Life (25-30C)	: 5 hours after mixing
Shelf Life	: Up to 24 months in tight sealed container (Subjected to reinspection after exceeding shelf life period)

Application Method	
	Brush, roller, compressed air spray and airless spray. Preferably use airless spray if a thicker coat is required in one application. Brush, roller, and compressed air spray generally lead to lower film thickness, so more applications may be required to obtain the recommended thickness per coat. In order to ensure maximum adhesion between coats, it is important to observe that, before recoating, the applied coat is dry and free from any form of contamination. In case it rains or raining is expected, it is advisable not to do any painting. Painting under relative humidity above 85% will adversely affect the subsequent performance of the coating. Condensation occurs during or soon after application and premature early exposure to rain or ponding water could result in color and gloss change. The optimum resistance of the coating is only attained after completion of the curing of the paint. Under average atmospheric conditions, it takes about 6 ~ 7 days. Exposure of the applied coating to severe abrasion or chemical and water spillage should therefore be avoided before completion of the curing period, the first two or three days being particularly critical.
Thinner	: Nippon Paint PU Recoatable Thinner. For thinning, substitute thinners other than those approved or supplied by Nippon Paint may adversely affect the product performance and void product warranty whether expressed or implied. Thinner should be added after mixing the two components. Adding too much thinner results in reduced sag resistance. Do not tend to further reduce the viscosity after reach pot life.
Brush / Roller	: Thin up to 10% by volume of Nippon Paint PU Recoatable Thinner for proper flow-out. Good quality brushes and mohair / short nap rollers should be used with full strokes. Avoid re-brushing. Additional coats may be required to achieve minimum specified film thickness.
Compressed Air Spray	: Thin up 15% by volume with Nippon Paint PU Recoatable Thinner
Airless Spray	: Thin up to 5% by volume with Nippon Paint PU Recoatable Thinner : Delivery pressure: 140-170 kg/cm ² : Tip size: 0.015"-0.017" : Spray Angle: 60° - 70°
Recommended Coating System	
Sealer	: Not Applicable
Top Coat	: NIPPON PAINT PU RECOATABLE CLEAR FINISH : 2 – 3 Coats <i>(Finish colour could vary depending on type and colour of the wood being applied. Thicker paint film will also give a darker colour.)</i>
Surface Preparation	
First, remove all unstable paint film, dust, oil, wax and other foreign matters. Sand using sandpaper Grade #80 or #100 to smoothen the surfaces as it will enhance the paint adhesion on the surface. If necessary, fill the wood grains with appropriate filler and then smoothen it out again with sandpaper. Ensure that the surface is clean, dry and free from wax before applying the first coat. Allow the paint to dry before applying the subsequent coat(s). If there are presence of raised fibre particles from the surface, remove it by light sanding before subsequent coating(s) for better finishing.	
Cleaning	
Cleaning Solvent	: Nippon Paint PU Recoatable Thinner.
All equipment should be cleaned IMMEDIATELY with thinner after use. For thinning, substitute thinners other than those approved or supplied by Nippon Paint may adversely affect the product performance and void product warranty whether expressed or implied.	

Tests

1. **ASTM D3359** on Adhesion of Paint by Tape Test
2. **ISO 2813** on Gloss Level
3. **ASTM D5402-19** on Solvent Resistance
4. **ASTM D4060** on Abrasion Resistance
5. **ISO 2812-4** on Chemical Resistance
6. **ISO 16474-3** on QUV-A for Gloss Retention Resistance
7. **ISO 3251** on Non-Volatile Matter

Environmental Conditions During Application

- Do not apply when the relative humidity exceeds 85% or when the surface to be coated is less than 3°C above the dew point.
- Do not apply at temperature below 7°C. If not, drying and overcoating times will be considerably extended.
- During application of the paint, naked flame, welding operations and smoking should not be allowed and good ventilation is necessary.

Safety Precautions

- Keep container tightly closed and keep out of reach children or away from food and drink.
- Ensure good ventilation during application and drying.
- When applying paint, it is advisable to wear eye protection.
- In case of contact with eye, rinse with plenty of water immediately and seek medical advice.
- Remove splashes from skin by using soap or water.
- Paint must always be stored in a cool place.
- When transporting paint, care must be taken. Always keep container in a secure upright position.
- Dispose any paint waste in accordance with the appropriate Environment Quality Regulations.

Note

* Theoretical Coverage is based on a mathematical formula and does not consider Loss Factor.

$$\left[\frac{\text{Volume Solid \%} \times 10}{\text{Dry Film Thickness } (\mu)} \right] = \text{m}^2/\text{lit}/\text{coat}$$

This theoretical coverage rate has been calculated from the volume solids of the material and is related to the amount of coating applied onto a perfectly smooth surface without wastage. For a practical coverage rate, due allowance should be made for atmospheric conditions, surface roughness, geometry of the article being coated, the skill of applicator, method of application etc. when estimating quantities required for a particular job.

The above information is given to the best of our knowledge based on laboratory tests and practical experience. However, since we cannot anticipate or control the many conditions under which our products may be used, we can only guarantee the quality of the product itself.
We reserve the right to alter the given without prior notice.

Disclaimer

The information contained in this document is provided to the best of Nippon Paint's knowledge, based on laboratory testing and practical experience. As our products are considered semi-finished goods, their performance may be influenced by conditions beyond Nippon Paint's control. As such, we can only guarantee the quality of the product itself.

Minor variations may be introduced to comply with local regulations. Nippon Paint reserves the right to modify the information in this document without prior notice.

Users are encouraged to consult Nippon Paint for specific guidance on the suitability of this product for their intended use and application method.

In case of discrepancies between language versions, the English (United Kingdom) version shall prevail.