



NIPPON POLYURETHANE RECOATABLE CLEAR FINISHING

Product Description:

NIPPON POLYURETHANE RECOATABLE CLEAR FINISH has been developed to provide a highly durable direct gloss and colour retention topcoat finish, incorporating an extensive range of performance characteristics. **NIPPON POLYURETHANE RECOATABLE CLEAR FINISH** offers outstanding operational performance including abrasion, chemical and impact resistance and colour/gloss retention.

Physical Characteristics of Paint:

Colour	: Standard colours as per colour card, special colours can be matched to requirement.
Texture	: High Gloss and Satin Finishing
Specific Gravity	: 0.98 - 1.25 (for mixture of base and hardener)
Solid Content	: 60 ± 2% by volume (ASTM D2697 1973)
Corrosion Resistance	: Unaffected by salt water or aggressive industrial environments.
Chemical Resistance	: Good resistance to oils, fats, aqueous solution and most industrial chemicals.
Temperature	: Dry heat up to 100°C.

Performance Characteristics:

1. Long recoatability properties.
2. Does not chalk easily despite exposure to UV light.
3. Resistant to splash and spillage of large variety of dilute acids, alkalis, detergents, hydrocarbon, solvents, petroleum products, mineral and vegetable oils.
4. Superlative gloss and colour retention on outdoor exposure. High stain resistance and impact resistance.

Recommended Uses:

For decoration and protection of exterior and interior wooden surfaces.

Recommended No. Of Coat	:	2 - 3 coats (Finish colour could vary depending on type and colour of the wood being applied. Thicker paint film will also give a darker colour.)
Recommended Film Thickness Per Coat	:	50 microns for dry film 85 microns for wet film
Theoretical Coverage At Recommended Dry Film Thickness	:	12.0 m ² /litre (for dry film thickness of 50 microns) $\text{Theoretical Coverage (m}^2\text{/litre)} = \frac{\text{Volume Solids (\%)} \times 10}{\text{Dry Film Thickness (\mu)}}$
Practical Coverage (20% Loss Factor)	:	9.6 m ² /litre (for dry film thickness of 50 microns)

Note : 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.

Application Methods	:	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.
1) Brush/Roller	:	Recommended for small areas and touch-up only. Good quality brushes and mohair/ short nap rollers should be used with full strokes. Avoid rebrushing. Thin up to 10% by volume of Nippon PU Recoatable Thinner for proper flow-out. Additional coats may be required to achieve minimum specified film thickness.
Guiding Data For Airless Spray	:	Delivery Pressure : 140-170 kg/cm ² Tip Size : 0.015"-0.017" Spray Angle : 60 - 70°
Thinning	:	If necessary, add up to 5% thinner by volume for application by brush, roller and airless spray; about 10%-15% by volume for application by compressed air spray.
Mixing Ratio	:	4 parts by volume of Nippon Polyurethane Recoatable Finish (Base) to 1 part by volume of Nippon Polyurethane Recoatable Finish (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 at 25°C to 30°C	:	5 hours after mixing

Thinner	: Nippon PU Recoatable Thinner
Cleaning Solvent	: Nippon PU Recoatable Thinner
<p>Note: 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.</p>	

Drying Time at 25°C to 30°C	: Dry to touch - Approximately 2 hours
	: Dry to handle - 16 hours
	: Dry to overcoat - Minimum - 8 hours
	- Maximum - indefinite
Curing Time at 25°C to 30°C	: 7 days
<p>Note: Drying time will become remarkably delayed under low temperature. Overcoating the previous coat of Nippon Polyurethane Recoatable Finish should be done within 6 – 7 days but preferably as soon as possible after it has been allowed 16 hours drying or else, it is desirable to roughen it by dry sanding with sandpaper before it is overcoated. This is to ensure proper intercoat adhesion. Exposure of the paint film to water, chemical and abrasion should be avoided as far as possible before full cure of the coating. When chalking occurs, chalks should be removed by water washing. Allow the surface to dry thoroughly prior to overcoating.</p>	

Surface Preparation:

WOOD
 Smoothen the surface to be painted using Grade #80 or #100 sandpaper. If necessary, fill the wood grains with appropriate filler and then smoothen 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). Should fiber be observed, dry sand lightly before subsequent coating(s) for better finishing.

Previously Painted Surfaces

Remove all unstable paint film, dust, oil, wax and other foreign matters. Particular care is necessary on previously waxed surfaces and thorough mechanical sanding is recommended to remove all wax. Presence of wax on substrates will affect the drying and adhesion of Nippon Timber Finish.

If the previous paint film is in sound condition and without wax, smoothen it with sandpaper. Clean off and dry.

For old paint which is in sound condition and without wax, smoothen it with sandpaper. Clean off and dry.

<u>Recommended Paint System</u>			
Sequence	Product Name	No. of Coats	Remarks
Finish	NIPPON POLYURETHANE RECOATABLE CLEAR FINISH	2 – 3 (Depends on colour)	Finish colour could vary depending on type and colour of the wood being applied. Thicker paint film will also give a darker colour.

Standard Packing	: 5 litres	(4 litres Base and 1 litre Hardener)
	: 20 litres	(16 litres Base and 4 litres Hardener)
Shelf Life at 25°C to 30°C	: 2 years	

Environmental Conditions During Application:

1. 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.
2. The surface temperature for application is 7°C. If not, drying and overcoating times will be considerably extended.
3. During application of the paint, naked flame, welding operations and smoking should not be allowed and adequate ventilation should be provided.

Safety, Health and Environmental Information:

1. In the wet state, this product is highly inflammable. In case of fire, blanket flames with foam, carbon dioxide or dry chemicals.
2. Keep away from sources of ignition. No smoking.
3. Keep container tightly closed and keep out of reach from children.
4. Do not breathe vapour/spray. Applying paint to large surface areas under closed environment should use air supplied breathing equipment. For small areas or short periods, a suitable cartridge mask should be worn.
 - Inhalation : Remove to fresh air, loosen collar and keep patient rested.
 - Ingestion : In case of accidental ingestion. DO NOT INDUCE VOMITING. Seek immediate medical attention.
5. Avoid contact with skin and eyes. Wear suitable protective coating such as overalls, goggles, dust masks and gloves. Use a barrier cream.
 - Eyes : In the event of accidental splashes, flush eyes with water immediately and obtain medical advice.
 - Skin : Wash skin thoroughly with soap and water or approved industrial cleaner. DO NOT USE solvent or thinners.
6. Care must be taken when transporting paint. Keep container in a secure upright position.
7. Do not empty into drains or watercourses. Dispose of any paint waste in accordance with the appropriate Environmental Quality Regulations.

Note : A Chemical Safety Data Sheet (CSDS) is available upon request.

NOTE :

1. This product is not suitable for use under immersed conditions.
2. If being specified for use at elevated temperatures, remove existing coatings prior to application of Nippon Polyurethane Recoatable Finish.
3. Do not apply to oleoresinous paint systems or recently applied alkyds (i.e. less than 6 months old).

NOTE :

*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 accuracy of our information or the suitability of our products in any given condition.
We reserve the right to alter the given data without notice.*