

777-011 Non Yellowing Gloss

PRODUCT DESCRIPTION AND USES

This high gloss aliphatic moisture-cure polyurethane offers superior protection against the yellowing and darkening typically seen in standard aromatic polyurethanes exposed to UV light. Using a non-yellowing finish on natural timber helps preserve its original colour for an extended period, which is especially important for light-coloured timbers or floors exposed to high levels of sunlight.

While this type of polyurethane does not contain UV absorbers, it is strongly recommended to add 778-040 additive to help prevent the bleaching effect of UV rays on timber or cork over time. Aliphatic (non-yellowing) polyurethanes cure more slowly than standard types and may feel slightly soft or tacky to the touch even after full cure. Despite this, they offer excellent abrasion resistance and a silky, attractive finish with smooth flow during application.

This finish is ideal for use on timber, coloured cork, parquet, particle board, and floors with pastel colours. It is not suitable for exterior applications. For outdoor use where a non-yellowing varnish or polyurethane is required, refer to specification sheet 09.38 Alpha Varnish.

All polyurethanes manufactured by Protective Paints Ltd contain low levels of free isocyanates, and most are formulated without Xylene, making them a safer option for applicators.

Typical Substrates

Timber
Coloured Cork
Pastel Coloured Cork – Timber/Concrete
Parquet
Particle Board/Strand Board

PHYSICAL PROPERTIES

Appearance	Clear / Gloss
Size	1L, 4L, 10L, 20L
Volume Solids	52%
Reactive NCO	4%
Free Isocyanate	<0.04%
Taber Abrasion	16-18mg
Solvent	Ester/Aromatic Hydrocarbons
Drying Time (25°C)	Touch Dry: 3-4 hours Hard Dry: 24 hours
Recoat Time (25°C)	Minimum: 24 hours
Full Cure (25°C)	7-10 days
Flash Point	41°C

An unopened container has a shelf life of approximately twelve months from the date of manufacture. Once opened, the contents react with moisture in the air creating thickening and eventually solidification. This process may occur in as little as 24 hours or up to 6 weeks after opening depending on storage conditions. Ensuring the lid is replaced immediately after use will minimise exposure to air and therefore assist with storage stability. Do not replace unused contents back into the container.

SURFACE PREPARATION

Proper surface preparation is essential to achieve a professional finish. Ensure all dust, dirt and other contamination is removed prior to coating.

New/Previously Uncoated

Coloured surfaces - Non yellowing finishes are extensively used for coating coloured timber/cork and therefore the sanding process is more critical as it must not remove the colouring.

Natural Timber

The timber must be sanded to provide a surface which is smooth with a good 'key' for the coating system. Sanding procedures will vary depending of flooring materials however with most types of timber, a fine finishing paper can cause undesirable burnishing which may prevent good adhesion of the first coat (refer sanding guide).

Make several cuts with the sandpaper increasing paper fineness with each cut. The final cut should be no finer than 100-120#. For best results ensure not to increase more than 1 grit size per cut i.e. 24#-40#, 40#-80# etc.

Previously Sealed or Coated

Ensure compatibility of product to existing coating prior to application.

Poor Condition

If previous coating has worn through to the substrate the entire floor must be sanded back to bare substrate and treated as a previously uncoated surface.

A coloured surface should not be allowed to deteriorate to the point where bare timber/cork is exposed, as this will destroy the decorative nature of the floor. Where this situation has occurred, either the surface must be patched or preferably sanded back to bare timber. The bevelled edges on coloured cork make this process non practical.

Good Condition

Sand entire floor using a 150#-240# screen disc or paper. Vacuum entire area to remove dust, dirt etc.

Concrete

Unsealed and untreated concrete must cure at least 30 days. Etch concrete using Protective Paints 736-080 Hydrochloric Etch and wash thoroughly with clean water to neutralise. Allow to dry thoroughly before application of coating system.

APPLICATION DATA

May be applied by using a soft bristled (250-300mm) brush, 6mm mohair roller or applicator.

A minimum of 48 hours should elapse before a freshly coated floor is subjected to light traffic.

Ensure moisture content of timber is between 12% -15% before polyurethane is applied. Ensure all dust and other contaminants are removed prior to coating.

Recommended D.F.T	30 microns / coat
Recommended W.F.T	75 microns / coat
Recommended No. of Coats	3 (refer System Specification)
Theoretical Spreading Rate	8-10m ² /litre
Thinners	Portco 2K Thinner
Cleaners	Portco 2K Brushwash

Thinning

Brushwash inhibits the cure of the polyurethane, and it is therefore essential equipment is thoroughly dry prior to application of polyurethane. **Brushwash must not be used as a thinner.**

Product is supplied "ready for use and should not generally require thinning unless being utilised as a sealer. If product has thickened or is drying faster in warmer conditions, a small amount of 2K Thinners may be used to ease viscosity and extend wet edge.

It is recognised that although products are produced at the viscosity we feel is best for the intended purpose, applicators may have individual requirements that better suit their technique. Remember, as the coating is thinned, the solids, gloss and build of the product are reduced which may necessitate a further coat.

On Bare Timber

(Excluding Particle Board and Strand Board) A diluted coat should be used as a sealer -refer details on thinning.

Apply at a spreading rate of 8-10 square metres per litre using the recommended equipment. When floor is sufficiently dry (12-24 hours), sand the surface using a paper no finer than 150#.

Vacuum off carefully in order to remove dust from between boards and skirting areas. Repeat the procedure above until 3-4 coats have been applied.

A 240# disc can be utilised to sand the surface prior to the final application of Duralon NY.

Notes

Do not apply when temperature or substrate is below 10°C, above 30°C or when it is extremely hot and dry.

Ensure dust masks are worn whilst sanding floor and organic cartridge mask whilst coating.

Where quicker cure is required, refer specification sheet 778-020 MC Catalyst.
Where additional UV protection is required, refer specification sheet 778-040 UV additive.

SYSTEM SUMMARY

SUBSTRATE	SYSTEM	1 ST COAT	2 ND COAT	3 RD COAT
Particle Board/ Strand Board	3 Day	777-011 NY Gloss	777-011 NY Gloss	777-011 NY Gloss
Timber/ Parquet	3 Day	777-011 NY Gloss	777-011 NY Gloss	777-011 NY Gloss
(Natural)	3 Day	777-011 NY Gloss (Diluted 25%)	777-011 NY Gloss	777-011 NY Gloss
Timber/ Parquet (Coloured)	3 Day	777-011 NY Gloss (Diluted 25%)	777-011 NY Gloss	777-011 NY Gloss
Coloured Cork	3 Day	777-011 NY Gloss	777-011 NY Gloss	777-011 NY Gloss
Concrete	3 Day	777-011 NY Gloss	777-011 NY Gloss	777-011 NY Gloss
(Natural Uncoated)				
Concrete (Coloured)	3 Day	777-011 NY Gloss	777-011 NY Gloss	777-011 NY Gloss

HEALTH AND SAFETY / STORAGE

For detailed information refer to the product label or SDS, available on request.

OTHER INFORMATION

This product may be used for a wide variety of surfaces. If the surface you propose to paint is not referred to, contact Protective Paints Technical Department for classification. For further technical information please phone 0800 724 684.

The information concerning the use and application of this product is intended for use by professional specifiers and applicators, is given in good faith and is believed to be correct at the date of issue. Protective Paints Ltd reserves the right to alter the product or specification without notice. The user should check the date of issue, and if more than 24 months have elapsed, should verify with our nearest sales office that the information is still current. Because we cannot control the way these products may be used, or the conditions they may be exposed to, we can give no express guarantees in respect of the performance of this product. However certain guarantees may be implied by law.

ISSUE: 3.0 / June 2025