

MONOTHANE 45 GLOSS is a transparent, single pack, moisture cure polyurethane that provides a hard wearing Gloss finish which maintains the natural character of timber.

Uses: MONOTHANE 45 GLOSS is used for coating all timber species, cork, particle board and concrete.

MONOTHANE 45 GLOSS can be applied over

TIMBERSEAL, SILVERSEAL, MONOTHANE or DUOTHANE FAST A/DUOTHANE PART A and DUOTHANE PART B.

MONOTHANE 45 GLOSS is compatible with and/or may be mixed with, MONOTHANE HS 50 GLOSS, MONOTHANE 44 GLOSS, MONOTHANE SILVER GLOSS, MONOTHANE SEMI GLOSS, MONOTHANE SATIN, MONOTHANE MATT and MONOTHANE SILVER SATIN.

Physical Description & Product Specification

		MONOTHANE 45 GLOSS
Appearance		Transparent Liquid with mild aromatic odour.
Colour		Pale Straw
Drying Time (hours) @ 25°C & 50% R.H.		Reduced temperature and/or increased humidity will slow drying (extend each drying phase).
	Dust Free	1.50
	Tack Free	3.00
	Print Free	4.00
	Hard Dry	5.50
Reflectance	(%)	95 – 100
Viscosity @ 25°C (seconds)		45 – 50
Solid Content	(%)	46 (±1)
Wet film per coat	(mm)	0.100
Dry film per coat	(mm)	0.046
Solubility		Not Soluble in Water.
Specific gravity (H₂O = 1):		0.97
Sanding & Recoat @ 25°C & 50% R.H.	(Hours)	4.0 – 5.5
Sanding properties		Excellent
Coverage	(m ² /Litre)	10
Full cure	(Days)	7
Shelf life	(Months)	12

Product Slip Resistance – AS/NZS 4586:2004

MONOTHANE has been evaluated by ATTAR (Advanced Technology Testing and Research) against Test Standard; AS/NZS 4586; 2004 Slip Resistance Classification of New Pedestrian Surface Materials; [Dry Test Standard – Appendix B & Wet Test Standard – Appendix A]

DRY SLIP RESISTANCE – refer Appendix 1 – TABLE 3, CLASSIFICATION OF PEDESTRIAN SURFACE MATERIALS ACCORDING TO THE DRY FLOOR FRICTION TEST.

Classification is F [> 0.4].

(Actual test result: Dynamic Coefficient of Friction - Mean of 0.75).

WET SLIP RESISTANCE – refer Appendix 1 – TABLE 2, CLASSIFICATION OF PEDESTRIAN SURFACE MATERIALS ACCORDING TO THE WET PENDULUM TEST.

Classification is X [35-44] Moderate contribution of the floor surface to the risk of slipping when wet. Equivalent to Ramp of R10. (Actual test result: British Pendulum Number - Mean of 36).

Application Data:

Floor Preparation:

General

1. Check that timber is adequately seasoned as if not, any subsequent cracking warping and shrinkage may compromise adhesion.

2. Ensure the surface is dry and thoroughly clean, removing all dirt, mildew, wax, grease, resin oils, tannins and dust. If Timber is extremely oily or tannin rich, dampen a mop or clean rag with Urethane Coatings THINNERS and complete a 'Chemical wash' wiping parallel to the grain in a similar manner to applying a coating. If a large area is to be cleaned, thoroughly rinse the mop or rag every 3 - 5m², re-dampen and continue.

3. Nail holes and surface defects should be filled with water based putty.

New Floors: Follow steps 1 to 3 above, sand the floor and fine sand, finishing with 120 grit screen back or pad and vacuum thoroughly.

Old Floors: Follow steps 2 to 3 above and clean with hot water and detergent. Roughen surface completely with 100 grit sandpaper and fine sand, finishing with 120 grit screen back or pad and vacuum thoroughly. Wipe floor with Urethane Coatings THINNERS. Test for compatibility by applying **MONOTHANE 45 GLOSS** on a small section of floor first. If 'craters' or 'fisheyes' appear add 20mls of Urethane Coatings FLOWMAX Anti-Rejection Fluid per Litre of **MONOTHANE 45 GLOSS** and stir thoroughly. Soon after application, inspect for rejections, and if necessary, continue adding FLOWMAX in increments of 10mls per Litre until the surface is free from rejections or up to a maximum of 100mls per Litre of **MONOTHANE 45 GLOSS**.

Application Orientation:

For interior flooring (including all species of timber, parquet, cork and particle board) and concrete.

Application Conditions:

DO NOT use **MONOTHANE 45 GLOSS** at temperatures below 10°C or above 30°C. On cold days for at least one hour prior to application warm **MONOTHANE 45 GLOSS**, by wrapping container in an electric blanket (temp setting 1) for up to 2 hours.

DO NOT use **MONOTHANE 45 GLOSS** if relative humidity is in excess of 85% AND/OR if the moisture content of timber is in excess of the Australian Standard (9-14%).

Application Method:

Apply with short nap (4 to 6mm) mohair roller, brush or lamb's wool applicator.

DO NOT return unused material to the can/drum. Touch dry; 1.5 hours at 25°C and 50% relative humidity, however, allow 4.0-5.5 hours to fully dry. Reduced temperature and/or reduced humidity will slow drying (extend time required to dry). Suitable for light foot traffic 24 hours after final coat.

N.B. If the coating does not sand to a fine white powder, leave for a further 12 hours between coats – In cold conditions, if possible & practicable operate artificial heating ([Radiator style] Column oil filed electric heaters are preferable - **DO NOT** operate heating equipment that utilise naked flames or red hot surfaces).

New Floors: Apply three coats as per all options below.

Old Floors: Apply two coats; 1st as per **SECOND COAT** options (a) or (b) below, then 2nd as per **THIRD COAT** and/or Final Coat below.

FIRST COAT - can be either (a) or (b) or (c);
(a) **TIMBERSEAL** – apply with a mohair roller. Allow 40-60 minutes to dry, no sanding is required prior to application of second coat.

(b) **DUOTHANE FAST A/DUOTHANE Part B** - apply with a mohair roller or lamb's wool applicator. Allow 90-120 minutes to dry. Lightly sand with 150 mesh screen-back and vacuum thoroughly before the next coat.

(c) **MONOTHANE 45 GLOSS** – apply with a mohair roller or lamb's wool applicator. Allow 4.0 to 5.5 hours to dry. Lightly sand with 150 mesh screen-back and vacuum thoroughly before the next coat.

N.B. **MONOTHANE CATALYST** may be added to the first and second coats of **MONOTHANE 45 GLOSS** to accelerate curing. Fine sand or buff between coats with 150 mesh screen back.

SECOND COAT – Apply Either (a) or (b);
(a) DUOTHANE FAST A/DUOTHANE Part B - apply with a mohair roller or lamb's wool applicator. Allow 90-120 minutes to dry. Lightly sand with 150 mesh screen-back and vacuum thoroughly before the next coat.

(b) **MONOTHANE 45 GLOSS** – apply with a mohair roller or lamb's wool applicator. Allow 4.0 to 5.5 hours to dry. Lightly sand with 150 mesh screen-back and vacuum thoroughly before the next coat.

THIRD COAT and/or Final Coat – Apply a very even coat of **MONOTHANE 45 GLOSS** with a mohair roller or lamb's wool applicator. Application of a consistent film thickness is critical to prevent stop and/or lap marks appearing as **MONOTHANE 45 GLOSS** dries.

IMPORTANT NOTICE: Although **MONOTHANE 45 GLOSS** is not as subject to sheen variation when compared with reduced sheen products, for best gloss levels Urethane Coatings recommend;

1. Restrict air flow by sealing under and around doorways, windows, skirting boards, air conditioning ducts/central heating vents, chimneys, cooling fans of refrigerator motors, etc. In extreme cases (to restrict air flow and/or to control airborne dust) it may be necessary to seal over ceiling penetrations such as down lights, lighting roses and air circulation vents.

2. Always Maintain a wet edge, otherwise a lap mark may appear after curing. As appropriate add 40-60mls of FLOWMATE Wet Edge Extender per Litre of **MONOTHANE 45 GLOSS**.
N.B. FLOWMATE Wet Edge Extender and FLOWMAX Anti-Rejection Fluid are compatible with each other and therefore, both together can be added to **MONOTHANE 45 GLOSS**, however, do not exceed a combined total of 100mls per litre of **MONOTHANE 45 GLOSS**.

3. Some timber species, notably Brushbox, Blackbutt, and Cypress Pine secrete oils and waxes which may migrate to the surface of the coatings causing surface imperfections. The addition of FLOWMAX Anti-Rejection Fluid may assist to alleviate this problem.

4. DO NOT apply reduced sheen products (MONOTHANE SEMI GLOSS, MONOTHANE SATIN, and MONOTHANE MATT) directly over putty as the silica in the putty may react with the matting agent in MONOTHANE turning the putty white – ensure that at least one coat of MONOTHANE GLOSS separates putty from reduced sheen coats.

5. **MONOTHANE 45 GLOSS** is completely compatible with Urethane Coatings range of solvent based stains and accordingly **MONOTHANE 45 GLOSS** can be tinted with the addition of any Urethane Coatings stain colour and applied as a build coat under the final coat of **MONOTHANE 45 GLOSS**. Please refer to the Urethane Coatings WOOD STAINS Technical Data Sheet for addition rates and application techniques.

Maintenance:

MONOTHANE 45 GLOSS requires 7-10 days to fully cure by absorbing moisture from the atmosphere.

Avoid heavy foot traffic during this period. After the curing period, regularly sweep with a soft bristle broom or an antistatic mop and as appropriate wash with a mixture of '3 litres of hot water to one cup of Methylated Spirit'. To look after the floor use mats - place a door mat outside each entrance and if possible, a softer mat immediately inside each door - this will assist to remove any sand, grit and small stones from shoe-soles/feet, that when walked over the floor are abrasive, acting like sandpaper. We caution against the use of vacuum cleaners, particularly if the bristles are worn as the cleaning head may then scratch the floor. The frequency of cleaning is dependent on the level of traffic, amount of grit carried onto the floor, and activity of children, and pets etc. In high traffic situations application of a sacrificial wear surface may be considered, i.e. a polish to take the brunt of the traffic. Suitable polishes are; Urethane Coatings PURASHINE, Johnsons One Go, Reckitts Long Life, or Peerless Gemini. These polishes are water based and easily applied with a foam applicator. Allow at least 10 days for the **MONOTHANE 45 GLOSS** to cure before application of Polish. USE protective pads under legs of furniture and always avoid dragging furniture over the floor.

Coverage:

10m² per Litre.

Thinning:

Thinning is not recommended, however Urethane Coatings THINNERS may be added if **MONOTHANE 45 GLOSS** has thickened, or if a higher coverage and a thinner coat is required.

Clean Up:

Thoroughly wash all equipment with Urethane Coatings CLEANING SOLVENT. Dry roller, brush, and applicator before reusing.

Packaging:

MONOTHANE 45 GLOSS is supplied in 1, 4, 10 and 20 Litre Drums.

Shelf Life

MONOTHANE 45 GLOSS is best if used within 12 months from manufacture, when stored in unopened containers under normal conditions of temperature and humidity.

Health & Safety Directions:

For detailed Health and Safety information refer to the **MONOTHANE SDS** as it is an integral part of using this product.

Usage of this material must be under well ventilated conditions to minimise inhalation of vapours. Wear respirator with filters that conform to AS 1716. Asthmatics, the very young, elderly people and pets should leave the site during the first 24 hours. Prevent skin contact by wearing impervious gloves, overalls, safety boots and safety glasses. Breathing of vapour is harmful and may cause lung irritation and allergic respiratory reaction. Irritates skin and eyes. Keep can/drum firmly closed as this product cures when exposed to air. In case of spillage, cover with earth, sand or absorbent material. Remove from work area and cover with water for 24 hours prior to disposal.

Flammable:

MONOTHANE 45 GLOSS contains 460gms per Litre of Aromatic Hydrocarbon. The can/drum contains volatile and flammable solvents and when applying the contents adequate ventilation to the outside must be provided. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing electrical switches, etc.) must be eliminated in or near the working area. **DO NOT SMOKE**. Keep Drum closed when not in use.

FIRST AID:

If affected by inhalation of vapour, remove to fresh air. If breathing difficulty persists or occurs later, consult a doctor and have MSDS ready. If swallowed, do NOT induce vomiting. Give water or milk. CONTACT DOCTOR OR POISONS INFORMATION CENTRE Australia 131126. In case of eye contact, flush immediately with water for fifteen minutes and call a doctor. In case of skin contact, remove contaminated clothing and wash skin first with Methylated Spirit, then wash with soap and water.

PRODUCT IDENTIFICATION:

UN No.: 1263
D.G. Class: 3
CAS No.: PROPRIETARY
HAZCHEM: 3[Y]
PACK. GRP.: III
Correct Shipping Name: PAINT
Manufacturers MANCODE: URECOAT

Notice to Readers:

Urethane Coatings make no representation as to the completeness and accuracy of the data contained in this Technical Data Sheet. It is the user's obligation to evaluate and use this data, and to comply with all relevant Commonwealth, State and Local Government laws and regulations. Urethane Coatings shall not be responsible for loss, damage or injury resulting from reliance upon or failure to adhere to any recommendations contained herein, from abnormal use of the material, or from any hazard inherent in the nature of the material.

End of Technical Data Sheet