



ASPIRE-EXTERIOR

POLYURETHANE FOR EXTERIOR

Technical Data Sheet

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Product Description: Aspire Exterior is 100% aliphatic PU with medium performance clear finish for exterior or interior wood exposed to sunlight, water, or temperature changes. It Contains UV blockers to reduce the sun's graying and fading effects. The exterior variety is non-yellowing and possesses good gloss retention and outdoor durability. It is available in gloss and satin finish.

To prevent the wood color from fading, use Sheenlac Exterior Penetrative Wood stain on bare wood, which acts as a best UV protector.

Area of usage: Ideal for use on Exterior doors, windows, trim, outdoor furniture.

Features & Benefits

Double the life of furniture - It has high elasticity leading to no cracks due to exposure to UV rays.

Forms a protective barrier against rain and moisture - Protect the wood from Algae and Fungal growth, as it has self-cleaning property.

Crystal clear finish - is ideal for use over light-colored woods and stains and does not change the change on exposure to sunlight.

Good gloss and gloss retention property - Maintain the gloss for years under normal environmental conditions.

Product Information:

Appearance	Glossy	:Transparent clear liquid Base
	Matt & sealer	:Translucent Base.
	Hardener	:Clear liquid
Finish	Glossy and Matt	
Gloss level (60° head)	Min 90% in Glossy, & 20% in Matt	
Solids	43-45 % by mass; Varies with the types of finishes.	
VOC	400 gm/ ℓ	
Recommended DFT	Min.: 12 µm	Max.: 30 µm
Viscosity at 30 °C	30-50 sec in Ford Cup # 4 (typical)	
S G at 30 °C	0.97 – 1.00 kg / ℓ (typical); Varies with the types of finishes	
Flash Point	above 15 °C	
Base to Hardener Ratio	4 parts of Base to 1 part of Hardener	
Thinner	Sheenlac PU Thinner D-67	
Theoretical spreading rate	9-10 m ² /ℓ per coat at 20 µm DFT. This serves as a guide only.	
Practical spreading rate	The practical spreading rate will vary depending on the porosity and profile of the substrate, as well as the application technique and tools used.	
Pot-life	4 h	
Shelf Life	Base -24 months, Hardener -12 months in unopened and, stored at the storage condition indicated below.	

Precautions

Material is supplied in containers excluding catalyst. Always ensure the product is catalysed in the correct proportions; failure to do so will result in several problems, namely; drying, overcoating, performance, cracking, crazing etc. Once mixed the product should be used within the pot life specified. Stir the base component well with a flat-bottomed paddle until product is uniform. Ensure that sufficient material be mixed so that the product can be applied within its use-able life. The temperature of the mixed product should preferably be above 10°C. Do not allow material to remain in spray equipment after use, thoroughly flush and clean all equipment with Lacquer Thinner. Once the kit has been mixed they should not be re-sealed and it is advised that of prolonged stoppages, work recommences with freshly mixed units.

Storage & Packing

To be stored in a cool, dry & well ventilated place away from moisture, heat and direct sunlight. Packaging – 1 ℓ, 4 ℓ, and 30 ℓ

Technical Properties

Pencil Hardness	HB	
Conical Mandrel (1/8") 180° bend	No cracking	
Adhesion	5B (No peel off)	
Hot water resistance - 2 hrs	No damage	
Stain Resistance - Tea, Coffee, Lipstick, Mustard oil	No stain mark	
10% Sulphuric Acid Resistance - 24 hrs	No mark / Damage	
5% Sodium hydroxide Resistance - 24 hrs	Mild disturbance in film.	
QUV-A, 60° Gloss Retention,		
- 250 hr	100%	
- 500 hr	98%	
Heat Resistance	<i>Continuous</i>	<i>Peak (for 1 hr)</i>
<i>Dry, Atmospheric</i>	100°C	120°C

(Test performance results were obtained in a controlled laboratory environment. Temp. listed above relate to retention of protective properties. Aesthetic properties may suffer at these temperatures).

Application Details:

Surface Preparation: All wood surfaces must be clean, firm and dry. Remove any oil, grease, mortar droppings, etc.

NEW WOOD: Sand in the direction of the grain, to a smooth finish with 150 followed by 220 grit paper. Remove dust with a damp cloth.

PREVIOUSLY VARNISHED WOOD IN GOOD CONDITION: . Sand to obtain a smooth surface using 150 grit emery paper. Remove all sanding dust using a vacuum or cloth dampened with mineral spirits.

PREVIOUSLY VARNISHED WOOD IN POOR CONDITION: Strip completely by deep sanding or by using Sheenlac Paint Remover. Rinse thoroughly with clean water. Deep sand to until there is no evidence of any residue. Remove dust with a damp cloth.

DISCOLOURED OR WEATHERED WOOD: Remove discolored or weathered layer by sanding with 100 grit paper and treat it with Sheenlac Pigmented Exterior Wood stains, to prevent further discoloration and restore the natural

color. Sand to remove the grain rise. Remove dust with a dry cloth.

FILLER: Do not fill the grain pores. Use Polyester putty to seal the major holes and cracks

STAIN THE WOOD – Adding stain to bare or stripped wood can both change the color and highlight the grain pattern of any wood. Apply Sheenlac SB or WB Exterior wood stains by rubbing or brushing against the direction of the grain will help fill deep pores with stain and prevent the discoloration of wood. Apply a liberal amount of stain, giving the wood an ample amount to absorb. Allow to dry for 30-60 mins.

Application Environment	Surface Temperature	Ambient Temperature.	Relative Humidity
Min	20 °C	15 °C	20%
Max	30 °C	40 °C	75%

Apply Aspire Exterior clear in two medium wet coats, allowing at least 5-10 minutes' flash time between each coat.

Application Method – Basecoat Sealer	Thinner	No.of coats	Re-coating Time	Sanding*
Conventional, Airless, Air Assisted Airless, HVLP	20-25% PU Thinner D-67	2	8-12 h (not exceed 72 hrs)	320 / 400

*Sand lightly between coats with 320 emery paper to denib. Dust off with dry cloth. This removes upstanding wood fibre ends and dust particles which could draw moisture in behind the film and shorten the life of the coating.

Application Method – Topcoat Glossy / Matt	Thinner	No.of coats	Re-coating Time	Sanding
Conventional, Airless, Air Assisted Airless, HVLP	20-25% PU Thinner D-67	2	8-12 h (not exceed 72 hrs)	320/400

HVLP GUNS - 1.2 mm—1.4mm tip 8-10 psi (output)

CONVENTIONAL GUNS - 1.2mm—1.6mm tip 40-50 psi

Drying Time (@ 30°C & 60 R/H)	Touch Dry	Tack Free	Full curing	Overcoating
	10-15 min	180 min	7 days	12 h

Clean up: Clean all equipment immediately after use with Lacquer Thinner. It is advisable to periodically flush out spraying equipment during the working day. Frequency of cleaning is dependent upon the amount sprayed, temperature and elapsed time. Work strictly in accordance with the specified pot life of the material.

Health & Safety Precautions:

- Always keep paint out of reach of children.
- Ensure good ventilation during application and drying.
- If accidental contact with skin should occur, wash immediately with soap and water.
- Take care to avoid contact with the eyes. In case of contact, immediately rinse the eyes with plenty of water and seek medical attention.
- Harmful if swallowed. Seek medical attention and do not induce vomiting.
- Do not smoke while painting.
- Flammable. Store in a cool dry place away from heat and sparks.
- Refer to Material Safety Data Sheet for complete information.

DISCLAIMER: The recommendations contained herein are given in all good faith and are meant to guide the specifier or the user. They are based on results gained from our tests and experiences and are believed to be reliable. No guarantee is implied by the recommendations contained herein since conditions of use, method of application and cleanliness of the substrate prior to painting are beyond our control. As application, environmental and design factors can vary, due care should be exercised in the selection and verification of the performance and use of the coating

N.B: Technology may change with time necessitating changes to this Technical Data Sheet (TDS). It is the responsibility of the user to ensure that the latest TDS is being used