Product Data Sheet
Awlspar Varnish

Intended Uses

Awlspar is a classic phenolic tung oil varnish, used for brightwork protection against corrosion and abrasion from water and weather. Fast-drying and re-coatable, for quick and flexible application.

* Excellent re-coatability
* Rich color and deep gloss
* High durable and protective

Specification Data

Volume Solids	48%
Specific Gravity	0.88
Available Packs	US Quart
Base	M3131
Reducer	OT0016 Awlspar Reducer
Equipment Cleaning	OT0016 Awlspar Reducer
Typical Shelf Life	2 years

Theoretical Coverage

Application Methods	Number of Coats	Recommended Per Coat			Theoretical Coverage Per Coat (at recommended DFT)
		WFT	DFT	Max DFT	
Brush, Roller, Air Atomized	7	53 µm 2.1 mil	25 µm 1 mil	38 µm 1.5 mil	19 m²/lt 774.1 ft²/Gal

Coverage calculations are based on theoretical transfer efficiency of 100%. Actual coverage rate obtained will vary according to equipment choice, thinning, application techniques, part size and application environment.

VOC

All VOC information contained herein is theoretical (unless otherwise stated). Actual VOC content may vary by batch from one color to another and when tested via standard test methodology.

Product	As Supplied (without reducer)			
	g/L	lb/gal	g/Kg	lb/lb
Awlspar Varnish	406	3.39	459	0.46

Surface Preparation

The surface preparation advice provided, and equipment suggestions, can be used as a guide. Preparation techniques and results will vary according to individual conditions, equipment choice/condition and other factors. Testing on a non-critical area should be carried out prior to full-scale preparation.

The wood should be clean, dry and smooth. Moisture content must be below 14%. Never paint wet or green timber as this may result in blistering and / or detachment.

If timber is badly weathered, hard sand in-line with grain with 60 or 80 grit sandpaper, ensuring all greyed, UV damaged timber fibres are completely removed. Ensure deep grain pits are thoroughly cleaned. A stiff wire brush may assist here.
Rough sawn lumber must receive heavy sanding to level the grain. Work through the grits to effectively level the grain 60/80 to 100/150 to 220 and so on.

New Wood: Use of a marine teak cleaner or wood bleach is advised on new wood to remove excess oils, promote color uniformity, and adhesion. Follow manufacturer's instructions for use and thoroughly remove all cleaner and neutralizer residue before proceeding. Rough sawn lumber must receive heavy sanding to level the grain. Work through the grits to effectively level the grain 60/80 to 100/150 to 220 and so on. When the grain is level, smooth sand the surface with 320 grit paper.

Old finishes in good condition should be washed washed with Awlprep Surface Cleaner T0008, T0170 (US/AP) or T0340 (EU), then sanded with 220-320 grit paper to remove the gloss.

Old finishes in poor condition should be removed.

Test on a small area to make sure Awlspar Varnish doesn't attack the old finish. If old finish is attacked, it must be completely removed.

Note: Due to the wide variety of substrates, surface preparations, application methods and environments, customers should test the complete system for adhesion and compatibility under their conditions prior to full scale application.

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Mixing & Reduction

Mixing and reduction requirements will vary according to individual conditions, climate, equipment choice/condition and other factors. Mixing and application of a small sample before full-scale application is recommended.

Application Methods	Mix Ratio (Base:Converter)	Reducer	Recommended Thinning	Spraying Viscosity
Brush, Air Atomized, Roller	-	T0016	0 - 20 %	-

New Wood: When finishing new wood reduce 100% (1 part M3131 to 1 part T0016 by volume) with T0016 for first coat only. This will allow the Awlspar to penetrate and seal the grain.
For spray application reduce between 50-100% with T0016. Subsequent coats should be applied with 25% reduction (T0016).
For brush application: thinning or reduction is not normally required (after the first coat). If desired, reduce up to 20% with T0016. Do not shake.

Application

Application equipment and parameters are given as a guide. Actual equipment choices will vary according to application conditions, equipment condition and other factors. Testing on a non-critical area should be carried out prior to full-scale application. Contact your local technical service representative for further advice if necessary.

Awlspar Varnish can be used to seal wood and build up a complete finishing system.
After new wood has been sealed, or on previously coated surfaces, apply light, smooth, even coats (2-3 mils wet) of full bodied material. At temperatures above 77°F (25°C), 2 to 3 coats can be applied per day. If sanding is required, allow to cure 24 hours before sanding. Best results are achieved when surface is sanded smooth with 320 -400 grit paper after every 2 to 3 coats. If building M3131 as a stand alone coating, repeat this process until the grain is filled and covered, 7-10 coats may be needed. Exact number of coats needed will vary by applied film thickness, the amount of sanding and type of wood.

For the traditionalists the Ultimate Brightwork System offers excellent performance longevity: Use Awlspar M3131 to seal and provide some color to the bare wood. Apply 2-3 smooth coats. Leave to dry for 72 hours minimum at constant temperature of 77°F (25°C). In colder temperatures leave up to 7-10 days before finishing with Awlbrite. See the application guide and/or your Awlgrip representative for further choice in systems.

Awlspar will cure at temperatures as low as 45°F (7°C); however, best results are achieved when temperatures are between 60°F (18°C) and 90°F (32°C).

If possible avoid applying or curing the material in direct sunlight. Do not apply paint materials to surfaces warmer than 105°F or colder than 45°F (7°C). Do not attempt to cure products at temperatures below 45°F (7°C).

Application Methods	Fluid Tip	Fluid Pressure	Fluid Flow Rate	Air Pressure
Air Atomized	1.00 - 1.30 mm 39 - 51 thou	-	180 - 280 cc/min	1.8 - 2.5 bar 26 - 36 psi

Recoatability & Drying Times

The data given for recoatability is not exhaustive. Actual recoatability can vary according to individual conditions, climate and surroundings. If unsure, consult your local technical service representative before proceeding.

Overcoated By	5°C (41°F)		15°C (59°F)		25°C (77°F)		35°C (95°F)	
	Min	Max	Min	Max	Min	Max	Min	Max
Awlspar Varnish					3 Hours	36 Hours		
Awlbrite Clear					3 Hours	3 Days		

Maximum recommended overcoating time is for unsanded product.
Awlspar Varnish which has been allowed to cure more than 36 hours must be sanded before recoating.

Warning Notes

If possible avoid applying or curing the material in direct sunlight. Do not apply paint materials to surfaces warmer than 105°F or colder than 45°F (7°C). Do not attempt to cure products at temperatures below 45°F (7°C).

The information in this Product Data Sheet is not intended to be exhaustive. Any person using the product without first making further enquiries as to the suitability of the product for the intended purpose does so at their own risk and, to the extent permitted by law, we can accept no responsibility for the performance of the product or for any loss or damage arising out of such use. The information contained in this Product Data Sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.

Please refer to your local representative or visit www.yacht-paint.com for further information.