Uses

Fairing compounds are used to produce a smooth surface (and to reduce drag). Awlfair ® LW is designed for fairing, leveling or smoothing surface imperfections due to gouges, pitting, dents or weld seams. Awlfair® LW can be used above and below the waterline. Although designed as a cosmetic material the design of the structure it is being applied to should not be ignored. Seek independent expert advice to ensure that the construction and design are suitable for the chosen system and will not cause the fairing material to crack or delaminate

Specification Data

Packaging: Available in 1 Quart, 1 Gallon (US only) , 2 Gallon , 5 Gallon , 60LT (EU only) and 200lt (EU only).

Base - Awlfair LW Base White D8200

Converter – Awlfair LW Conv. Red D7200

Equipment Cleaning ..... T0006 or T0002

Theoretical Coverage:

Application Method	Number of Coats	Recommended Per Coat			Theoretical Coverage Per Coat (at recommended DFT)
		WFT	DFT	Max DFT	
Longboard battens / Trowels / Spatulas / Putty Knifes	As required	6000µ* 240 mil* 6mm 0.25 inch	6000 µ 240 mil 6mm 0.25imch	10000 µ 400 mil 10mm 0.4 inch	0.63 m^2/L 6.8 ft^2/gal

* A max DFT of 5 - 6 mm per application is recommended to minimize air entrapment. Thicker applications may lead to excessive air entrapment which in turn can lead to defects and a system failure.

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

Mechanical Properties

Test	Temperature		
	-20°C	0°C	20°C
Compressive Strength (MPa)	66	60	47
Compressive Strain (%)	6	6	5
Tensile Strength (MPa)	19	23	20
Tensile Strain (%)	0.5	0.8	0.8
Tensile Modulus (MPa)	3541	3041	2527
Flexural Strength (MPa)	42	39	36
Flexural Strain (%)	1.6	1.5	1.6
Flexural Modulus (MPa)	2874	2596	2272
Thermal Expansion Coefficient (x10-5)	8		

Warning: The information set out above is provided for guidance only and is based on our own internal product testing under controlled conditions using hand-mixed product. Please note that there may be slight variations when the product is used in service conditions. Air pockets due to poor application will significantly affect the mechanical properties of the Awlfair® LW and therefore must be eliminated as far as possible. We appreciate that it is very difficult to entirely eliminate air pockets in an industrial environment - you can however, minimize any risk by eliminating air pockets as far as possible and by ensuring that any air pockets are less than 4mm. The use of battens when fairing can result in excessive air pockets and should be discussed with an Awlgrip Technical Representative. If in doubt, test the product for the intended use on a suitable mock-up representative of the vessel area to be faired in order to fully take into account any specific design, temperature, fabrication, substrate, application and product thickness/scheme considerations. Seek independent expert advice to ensure that the construction and design are suitable for the chosen system and will not cause the fairing material to crack or delaminate. We have taken reasonable care in preparing the information contained in the table above and in collecting and preparing material for inclusion in it but do not represent or warrant that it is free from error or that the information content is complete or accurate. To the extent permitted by law, International Paint Limited, trading as Awlgrip®, accepts no responsibility whatsoever for any loss, damage or other liability arising from any use of information contained in the table above or reliance upon the information which it contains.

VOC

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

Product	As Supplied			
	g/L	lb/gal	g/kg	lb/lb
Base (D8200)	0	0	0	0
Converter (D7200)	84	0.70	120	0.12
Mixed (1:1 by volume)	42	0.35	46	0.05

Specific Gravity: 0.91

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 age and other factors. Testing on a non-critical area should be carried out prior to full-scale preparation.

Only apply over properly applied and prepared Awlgrip primers. Hullgard Extra Epoxy Primer and High Build (GRP only) are recommended substrate primers.

Awlfair® LW may be applied direct to Hullgard Extra without the need for sanding. High Build must be sanded prior to application of Awlfair® LW. See the relevant primer product datasheet for details.

Mixing & Reduction

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

Application Method	Mix Ratio	Recommended Thinning
Longboard battens / Trowels / Spatulas / Putty Knifes	1:1 by volume 1.59:1 by weight of D8200:D7200	**Do not add any thinners or reducers to Awlfair LW**

Mix the two components thoroughly to a uniform pink color with no streaks or lumps.

Warning: Do not add reducers, solvents or thinners of any kind to Awlfair® LW.

Awlfair® LW can be mixed using a suitable automatic mixing machine. The use of a mixing machine will generally increase the density of the product and will change the mechanical properties of the fairing compound. At the same time, automatic mixing equipment can provide productivity and health and safety benefits. Please consult your local technical representative for further advice regarding the use of automatic mixing equipment.

Recoatability and Drying Time

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

Drying times: Note: (While the fairing compound may appear hard dry, curing will continue for several days. This does not prevent overcoating)

Drying	60°F/15°C	77°F/25°C	95°F/35°C	Notes
Hardness Development (Shore D)	>60 after 48 hours	>60 after 24 hours	>60 after 16 hours	
Pot life	2½ - 3 hours	1½ - 2 hours	¾ – 1 hr	

Anticipated Cure Time at 75ºF/25°C/50% R.H: 8 hours touch dry; 24 hours resistance to foot/tread; 7 days full cure.

Recoatability: Awlfair® LW must be sanded before recoating with itself, surfacing filler or any other high build primer. It must be over coated with an approved high build primer to reduce the risk of print through of the fairing compound profile.

Overcoated By	60°F/15°C		77°F/25°C		95°F/35°C	
	Min	Max	Min	Max	Min	Max
Awlfair Surfacing Filler	42 hours	Unlimited*	17 hours	Unlimited*	6.5 hours	Unlimited*
Epoxy Sprayable Fairing Compound						
High Build						
Hullgard Epoxy						
Ultra Build						

Warning: Some areas may need extra applications and additional block sanding to achieve specified quality (i.e. under dark hulls).* Fairing compound must be sanded prior to application and application of primer should take place as soon as possible after sanding

Application

Application equipment and parameters are given as a guide. Please ensure a risk assessment is carried out to assess the level of PPE required for the particular task undertaken when using this product.

Do not use below 13°C/55°F or warmer than 40ºC/104°F. Proper application and/or cure results may be more difficult to achieve when conditions are outside this range. Avoid conditions of low temperature with high humidity as this can result in the formation of a surface by-product that must be removed by either detergent wash followed by fresh water wash or by sanding.

Apply Awlfair® LW by trowel to an area you can work in 15-20 minutes. Start with thin coats of up to 6mm in low areas and build out to high areas. Allow to cure. Several applications may be necessary to fill large areas. Block and machine sand with 36-80 grit paper. Remove air pockets and chamfer the edges prior to refilling as appropriate. Remove sanding dust and residue before applying more Awlfair L.W. Stop when the faired surface meets the fairing quality specified for the project.

Pot life and working time is dependent upon temperature. Warmer climates will decrease pot life.

Note: When battens are used in the fairing process, voids and hard edges can form when the battens are removed. Failure to correctly remove the batten, grind the area out to a tapered transition at greater than 7:1 ratio and then apply product in 6mm applications can lead to air voids, lack of adhesion and print through of the batten line.

Note: Awlfair® LW must be sealed with Hullgard Epoxy Primer (D6070/D3707) when used below the waterline.

Note: Awlfair® LW should be sealed with an Awlgrip Epoxy Primer such as High Build or Ultra Build when used above the waterline. This will maximize gloss and color holdout in the Awlgrip top coat system. The Awlgrip Surfacing Filler may be used on top of the Awlfair® LW to cover pinholes and sand marks prior to priming.

Sanding:

Awlfair® LW is sandable after 48 hrs at 55ºF /13°C , 17hrs at 77ºF/25°C & 6.5 hrs at 95°F/ 35°C.

Block and machine sand with 36 to 80 grit paper.

Warning Notes:

The information contained herein is for guidance only and is provided without any warranty of any kind, express or otherwise. AkzoNobel only warrants the quality of the products we supply. AkzoNobel does not have any control over the unique design of the vessel, the construction process or the application process – all of which may affect the overall performance of any coating product. Stress and strain resulting from the vessel design & construction may be transferred into the fairing system and you should ALWAYS seek independent expert advice as to the appropriateness of a particular design or structure for use of filling and fairing products.

If there is any inconsistency in the text between datasheets, the English (UK) online version will prevail.

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