Product Data Sheet

Awlgrip HDT Clearcoat





Intended Uses

Awlgrip HDT Clearcoat (High Definition Technology) is a superior-quality polyurethane Clearcoat that combines hardness and micro-scratch resistance with the repairability of a softer coating. Tailored to provide gloss, protection and color retention as the final layer above Awlcraft SE Basecoat, with outstanding DOI (Distinctness of Image).

- * Provides a smooth, hard finish
- * Durable, with high micro-scratch resistance
- * Repairable, buffable and polishable
- * VOC compliant (420g/L)

Specification Data

Volume Solids 49% (mixed product including Activator)

Specific Gravity 0.98 - (mixed product including Activator)

Available Packs 1 US Gallon (=3.78L) for Base and Curing

1 US Gallon (=3.78L) for Base and Curing Solution 1 US Quart (=0.95L) for Activators

Base Awlgrip HDT Clearcoat (OC0300)

Converter Awlgrip HDT Curing Solution (OC0010)

Reducer Activators:

Awlgrip HDT Slow Activator (OA0010)

Awlgrip HDT Medium Activator (OA0015) - US only

Awlgrip HDT Fast Activator (OA0020)

Activators are essential for the technology of this product to achieve the required curing.

Equipment Cleaning T0001, T0002, T0003

Theoretical Coverage

Application Methods	Number of Coats	Recommended Per Coat			Theoretical Coverage Per Coat (at		
		WFT	DFT	Max DFT	recommended DFT)		
Air Atomized	2	75 µm	37 μm		13.2 m²/lt		
		3 mil	1.5 mil		537.8 ft²/Gal		

Coverage calculations are calculated for mixed base, curing solution and activators and are based on a theoretical transfer efficiency of 100%. Actual coverage rate obtained will vary according to equipment choice, thinning, application techniques, part size and application environment.

The total DFT can be reached in 2 to 3 coats depending on application. Minimum DFT figures are post sanding.



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.

VOC values are for the individual components and for the mixed product and recommended mixed ratio.

Product	As Supplied (without reducer)						
	g/L	lb/gal	g/Kg	lb/lb			
OC0300 Base	423	3.53	432	0.43			
OC0010 Converter	311	2.60	305	0.30			
OA0010 Thinner	838	6.99	997	1			
OA0015 Thinner	838	6.99	997	1			
OA0020 Thinner	837	6.99	996	1			
Awlgrip HDT Clearcoat	420	3.51	427	0.43			



Surface Preparation

For the application of the basecoat please refer to the Awlcraft SE TDS.

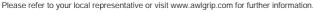
Awlgrip HDT Clearcoat should be applied over Awlcraft SE Basecoat.

Awlcraft SE Basecoat surface must be kept clean at all times before Awlgrip HDT Clearcoat application. See Awlcraft SE Technical Datasheet for recommendations.

Over Awlgrip Topcoat/Awlgrip HDT/Awlcraft 2000 sand topcoat with P400 to remove the gloss and clean with Surface Cleaner T0170 (US/AP) or T0340 (EU) using the two cloth wipe down method.

Do not use unless mixed thoroughly with the curing agent at specified ratio. Avoid painting in direct sunlight. Do not apply paint materials to surfaces less than 5°F (3°C) above dew point, or to surfaces warmer than 105°F (41°C). Ambient temperature should be minimum 55°F (13°C) and maximum 105°F (41°C). At standard conditions (77°F (25°C), 50% R.H.), avoid applying topcoats when the temperature could drop below the dew point within 6–8 hours after the application.

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.



Product Data Sheet

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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.

Mix Ratio (by volume):

1:1:12.5% (Base:Curing Solution:Activator) eg 1 Gallon:1 Gallon:1 Quart or 100mL:100mL:25mL.

Induction time = 15 minutes.

Mix to a smooth, homogenous mixture.

Awlgrip HDT Clearcoat is designed for spray application only. Correct choice of activator must be made according to the application conditions and project size. For further guidelines please refer to Awlgrip HDT Clearcoat tips and tricks or contact your local representative.

General guideline:

15-23°C (59-73°F) - OA0020

20-30°C (68-86°F) - 50:50 mixture of OA0010 and OA0020 by volume or OA0015 (US only)

> 30°C (>86°F) - OA0010

Warning: Using OA0010 in isolation should only be undertaken in extreme temperatures and relative humidity and following guidance from your local technical service representative. Use OA0010 as an additive to blend with other HDT activators to control drying / cure times and / or to increase working pot life. Use of OA0010 at lower temperatures and humidity may result in excessive cure times, increasing the risk of hazing / down-glossing.



Application

To apply Awlcraft SE Basecoat please refer to the Awlcraft SE TDS. To ensure optimal adhesion between coats Awlgrip HDT Clearcoat should be applied according to the overcoating intervals as described in the Awlgrip HDT Clearcoat Recoatability & Drying Times section.

Apply a full coat of Awlgrip HDT Clearcoat to the surface. Allow tack coat to "flash off" 30-45 minutes depending on application conditions. Apply a slightly heavy second coat. A third coat can be applied to reach DFT if needed.

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.

Application Methods	Fluid Tip	Fluid Pressure	Fluid Flow Rate	Air Pressure
Air Atomized	1.20 - 1.40 mm	-	180 - 280 cc/min	3 - 5 bar
	47 - 55 thou			44 - 73 psi

Air Pressure: Please refer to the air cap datasheet for further information.



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.

Drying	15°C (59°F)	25°C (77°F)	35°C (95°F)	
Hard Dry	2 Days	24 Hours	6 Hours	
Touch Dry	20 Hours	17 Hours	3.5 Hours	
Pot Life	3.5 Hours	2.5 Hours	1.5 Hours	1

Values in the table are for a 50:50 mix by volume of Awlgrip HDT Fast Activator and Awlgrip HDT Slow Activator. If using only Awlgrip HDT Fast Activator or Awlgrip HDT Slow Activator at a different ratio drying time and pot life will vary.

Awlgrip HDT Clearcoat has a shorter pot life than a standard polyurethane topcoat.

Overcoated By	15°C (59°F)		25°C (77°F)		35°C (95°F)		
	Min	Max	Min	Max	Min	Max	
Awlgrip HDT Clearcoat	2 Hours	24 Hours	30 Minutes	24 Hours	30 Minutes	24 Hours	

For overcoating over Awlcraft SE Basecoat, please refer to Basecoat TDS.

Awlcraft SE Basecoat surface must be kept clean at all time before clearcoat application. To reduce dust contamination, clean compressed air or tack rags should be used over Awlcraft SE Basecoat. Oil contamination should be removed using light amounts of Awlgrip Wipe Down Solvent (NA/AP: Awlprep T0008 or Awlprep Plus T0115; EU: Surface Cleaner T0340). In case of heavy contamination contact your local Representative.

Recoatability: Spray application consists of 2 to 3 coats applied over 2-4 hours. Exact time will vary with temperature, project size and film thickness applied. Awlgrip HDT Clearcoat cannot be overcoated with itself after 24h. Please contact your local representative for more information.

Some Important Points

Awlgrip HDT Clearcoat is compatible with Awlgrip repair product. Please refer to the Awlgrip Repair Product page on Awlgrip.com or Awlcraft SE Repair manual for further information.



Warning Notes

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.awlgrip.com for further information.

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Product Data Sheet

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