

Product Data Sheet

Awlgrip HDT



Intended Uses

Awlgrip HDT (High Definition Technology) is a high performance polyurethane sprayable topcoat that combines hardness and micro-scratch resistance with repairability. Tailored to provide exceptional gloss, unrivalled appearance and superior protection.

- * High gloss & excellent distinction of image (DOI)
- * Durable and repairable, making maintenance easier
- * True colors available on mixitcloud.com

Specification Data

Volume Solids	51% (mixed product including Activator)
Specific Gravity	1.05 (mixed product including Activator)
Available Packs	1 US Gallon (=3.78L) for Base and Curing Solution 1 US Quart (=0.95L) for Activators
Base	Awlgrip HDT Base
Converter	Awlgrip HDT Curing Solution (OC0010)
Reducer	Activators: Awlgrip HDT Slow Activator (OA0010) Awlgrip HDT Medium Activator (OA0015) - US only - (US) Awlgrip HDT Fast Activator (OA0020) Activators are essential for the technology of this product to achieve the required curing.
Equipment Cleaning	T0001, T0002, T0003
Typical Shelf Life	3 years for Base and Activators 1 year for Curing Solution 2 years for YSC Toners

Theoretical Coverage

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

The total DFT can be reached in 2 to 3 coats depending on application.

Polishing or sanding will reduce the overall DFT. Consider applying more coats to achieve the recommended film thickness.



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
C0310 Base	423	3.53	432	0.43
C0010 Converter	311	2.60	305	0.30
C0310 / C0010	423	3.53	432	0.43
Awlgrip HDT	415	3.46	415	0.42



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.

Awlgrip HDT should be applied over 545 Epoxy Primer or previous Awlgrip Topcoat/Awlgrip HDT/Awlgrip 2000.

Over Awlgrip Topcoat/Awlgrip HDT/Awlgrip 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.

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.



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 is designed for spray application only. Correct choice of activator must be made according to the application conditions and project size.

Product Data Sheet

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General guideline:
 15-23°C (59-73°F) - OA0020
 20-30°C (68-86°F) - 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

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.

To ensure optimal adhesion between coats Awlgrip HDT should be applied according to the overcoating intervals as described in the Awlgrip HDT Recoatability & Drying Times section. Apply a full coat of Awlgrip HDT 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 Methods	Fluid Tip	Fluid Pressure	Fluid Flow Rate	Air Pressure
Air Atomized	1.20 - 1.40 mm 47 - 55 thou	-	180 - 280 cc/min	3 - 5 bar 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	46 Hours	22 Hours	6.5 Hours	
Touch Dry	6 Hours	4.5 Hours	1.5 Hours	
Tape Free	3 Days	3 Days	2 Days	
Pot Life	3 Hours	2.5 Hours	2 Hours	

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 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	2 Hours	24 Hours	30 Minutes	24 Hours	30 Minutes	24 Hours		

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 cannot be overcoated with itself after 24h. Please contact your local representative for more information

Some Important Points

Awlgrip HDT is compatible with Awlgrip repair product. Please refer to the Awlgrip website or to the Awlgrip Application Guide for further information.

Please refer to the Awlgrip website or to the Awlgrip Application Guide for information on maintaining Awlgrip HDT.



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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