



Quality Coatings Since 1950

Data Sheet No. 1035/101

ACE-CAT

Acid-Catalysed Low Toxic Coating Clear

Date of Issue: 24 / 11 / 06

Description

A quality low formaldehyde, high build acid-catalysed clear coating. Designed to coat high-end interior furniture, for timber, veneer and MDF substrates. Ace-Cat has the benefit of being user friendly, durable, with a silky smooth feel, and high resistance to heat, alcohol and moisture.

Principal Uses

- Commercial and domestic furniture
- Kitchen and wardrobe doors
- Office furniture
- Hotel furniture
- Shop fitting

Features & Benefits

- Low formaldehyde and odour
- Free of hydrocarbon solvents
- Extremely high build
- Great flow & levelling properties
- Excellent resistance to abrasion
- High heat, alcohol & water resistance
- Superior vertical hold-up

Availability

Clear in the following gloss levels;

Semi- Gloss	50%
Satin	25%
Flat	10%

Please Note: Gloss ratio's will vary pending dry film thickness, application technique and substrate.

Equipment Wash

Clean all equipment using Pylon Thinner C or Solvent MEK.

Data Sheet Procedure

Pylon Coatings advises that this data sheet and the relevant MSDS must be completely read and understood prior to application.



Application

By spray application in a suitable and approved spray booth.

Wet Film Thickness (WFT)

125 – 175 microns wet, per coat (*ref. pg. 3*).

Theoretical Coverage

Flat Panels: 8 – 10 metres²/Lt



Mixing & Thinning

Mix Ratio	Part A	Part B
20 : 1	20 1Lt	1 50mls

Mix 20 parts “Part A” to 1 part “Part B” thoroughly with a flat stirrer, then let it stand for 10 mins. before adding thinners.

Fast	Thinners C
Medium	Thinners A
Slow	* Ace-Cat Thinners

* For best results, use Ace-Cat Thinners. Ace-Cat Thinners are a hydrocarbon free thinner.

5 - 20% Pylon Thinners, (*ref. pg. 2*).



Drying Times @ 25° C

Dust Free	10 – 15 mins
Print Free	20 – 30 mins
Sand & Re-Coat	90 – 120 mins
Hard Dry	3 – 4 days



Pot Life

24 - 48 hrs pending temperature and humidity.



Solid Content

By Weight 47%


Packaging 4.2Lt kit & 21Lt kit



Part “A”	4Lt	20Lt
Part “B”	200ml	1Lt

Application System Guide

(based at 25° C and 60% humidity)

	<u>% Thinners</u>	<u>Fluid Nozzle</u>	<u>Air Pressure</u> 			
			<u>Gun</u>	<u>Pot Pressure</u>	<u>Pump</u>	<u>Pump Ratio</u>
Suction Pot	20 – 30%	1.8 – 2mm	40 – 55psi			
Gravity Pot	15 – 25%	1.8 – 2mm	40 – 50psi			
Pressure Pot	10 – 15%	1.5 – 2mm		15 – 30psi		
Air Assisted Airless	5 – 10%	11– 13 thou			1000 – 1500psi	12 – 20:1
Straight Airless	0 – 5%	9 – 11 thou			1000 – 1500psi	16 – 20:1

- **HVLP**; set the air cap pressure at 10psi and use the guide as indicated for suction pot.

Viscosity

at 25° C, measured with a Ford 4 cup, + or – 3 seconds

58 seconds



Surface Preparation

- 1) Surface must be clean, dry and free from dust, grease, dirt and all other contaminants before proceeding.
- 2) Fill small defects, cracks and holes with a suitable putty. Allow sufficient time to dry as per specifications.
- 3) **Sanding**
 - a. Wood substrates; use 180 - 280 grit free-cut sandpaper with the grain until the surface is smooth and even.
 - b. MDF board; use 220 - 280 grit free-cut sandpaper paying special attention to all mouldings. Sand until the surface is smooth and even.
- 4) Remove all sanding dust using an air gun and clean lint free cloths.

Staining and Sealing

- **Staining**; following the preparation, apply the suitable stain and colour from Pylon's range.
- **Clear finish**; seal with Ace Cat Sealer or self-seal with Ace Cat Clear.



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Finishing Specifications

- 1) Following sealer coat, allow 90 - 120 mins. to dry pending temperature.
- 2) De-nib / lightly sand with the grain with 280 - 320 grit sandpaper until the surface is smooth and even.
- 3) Remove all sanding dust using an air gun and a clean lint free cloth. This is an extremely important step to follow with this coating.
- 4) **Application;** apply a coat of pre-mixed Ace Cat Clear as per the *application system guide* listed on page 2.
- 5) Allow 90 - 120 mins to dry, depending on temperature.
- 6) Repeat steps 2, 3, 4 and 5 ensuring that the maximum build does not exceed a dry film thickness of 150 microns, therefore a total (including sealer) of 4 - 5 coats when using a conventional spray, or 2 - 3 coats by airless spray.
- 7) **Toning;** extra colour depth can be achieved by adding up to 10% by volume of Pylon Fast Stain. Toning is advised in the 2nd coat, or before the last coat of clear. Ensure that the toning coat is evenly applied and take extra care when de-nibbing to make sure the coat is evenly and gently sanded.



Application Tips

- A light dustcoat for the first coat on MDF board will assist in sealing. Also a dust coat to seal timber and veneer substrates reduce bubbling;
- If orange peel occurs, either reduce the air pressure, add more thinners or use a slow thinner to suit;
- If pin holes occur, try to apply a lighter coat or add a slower thinner
- If blooming or chilling occurs add a slow retarder thinner.

Thinners Selection

Fast	Thinners C
Medium	Thinners A
Medium	Ace Cat Thinners

Ace Cat Thinners is the recommended thinners, as it will enhance the flow, and levelling of the coating. Ace-Cat Thinners are a hydrocarbon free thinner.

Thinners C or A can be used in cold climates to speed up the drying process.



Storage Instructions

Store in an approved dangerous goods cabinet or bunker in dry condition below 35° C.

Shelf life; Part A - 12 months if unopened and Part B - 6 months if unopened

Opened products should be used within 6 months.

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Health and Safety

Ensure that all individuals using this product have read and understood this data sheet and the related MSDS.

Sanding dust and spray mist are produced when using this product, so operators should comply with the following guidelines:

- application to take place in a well-exhausted spray booth that complies with AS 4114;
- wear a cartridge respirator conforming to AS/NZ 1715/16 – 1994;
- wear eye protection glasses or goggles conforming to AS/NZ 2161-1978;
- wear ear protection if the noise level is above 85 dB. AS/NZ 1270-1988;
- avoid contact with skin and eyes and avoid breathing the vapour or spray mist;
- wear suitable protective clothing including rubber or PVC gloves and safety goggles;
- when using the product, do not eat or smoke;
- keep away from heat and naked flame as this is a flammable liquid;
- if poisoning occurs DO NOT induce vomiting, give a glass of water and contact a doctor or the **Poisons Information Centre ph: 131 126.**

Do not use if you have chronic (long term) lung or breathing problems.



Warnings

Pylon Coatings advises that:

- you review, understand and follow this data sheet and the MSDS before use;
- we only recognise a coating system that has been exclusively used with Pylon products;
- the total dry film thickness should not exceed 150 microns, as excessive build can lead to stress cracking as the substrate adjusts to its new conditions of temperature and moisture;
- Ace-Cat should be tested on an off-cut of the selected substrate before proceeding;
- Ace-Cat is not recommended in high moisture areas, eg; bathroom fixtures & vanities, kitchen bench tops, bar tops, etc;
- Ace-Cat is for selected internal timber, veneer and MDF surfaces;
- Ace-Cat should not be used directly on timber and veneers that have an uneven moisture content such as Beech. Use Pylon's Image polyurethane to seal the surface in preparation;
- Ace-Cat should not be exposed to extreme temperature, ultra-violet light, high humidity or severe abrasion;
- while Ace-Cat will create an excellent protective film, it cannot protect the wood from aging from direct sun, and discolouration through the natural tannins found in the timber;
- Ace-Cat is not to be applied during extreme temperatures, i.e. above 38° C and below 10° C.

Condition of Use

All Pylon Coatings products are manufactured from high-grade materials to a rigid quality assured system ISO 2001. We have no control over the conditions under which these products are stored, transported, handled or used, so customers are advised to test the product before adapting them to their own use. The information contained in this data sheet is based on data appraised in our own laboratories and from comprehensive market research. Pylon Coatings can only control the quality and formulation of our own products, and have no control over the quality or consistency of other products or substrates to which the products are being applied. Due to the possible variations between our controlled laboratory test conditions and techniques, differences in application and the vast range of substrates in today's market, Pylon Coatings supplies its products only on the condition that the consumer is satisfied with the performance of the product in meeting their requirements.