



Protective & Marine Coatings

ACROLON™ 1850 ACRYLIC EPOXY FINISH

Revised 07/2017 Issue 5

PRODUCT INFORMATION

PRODUCT DESCRIPTION

A two pack Isocyanate free finish based on an acrylic epoxy binder system

ENDORSEMENT

Complies with Norsok M501 Rev 6 System 1 as part of a three coat system.

Certified for decontamination in accordance with EX07190/06/33/03.

PRODUCT CHARACTERISTICS

Finish: High Gloss

Flash Point: Base 34°C Additive 33°C

Colours: White and full shade range

Volume solids: 59 ± 3% (ASTM-D2697-91)

VOC:

345 gms/litre determined practically in accordance with UK Regulations PG6/23

360 gms/litre calculated from formulation to satisfy EC Solvent Emissions Directive

252 gms/kilo content by weight from formulation, to satisfy EC Solvent Emissions Directive

AVERAGE DRYING TIMES

	15°C	23°C	35°C
To touch:	2 hours	1 hour	½ hour
To recoat:	6 hours	3 hours	2 hours
To handle:	12 hours	6 hours	4 hours
Pot Life:	5 hours	3 hours	1 hour

These figures are given as a guide only. Factors such as air movement and humidity must also be considered.

RECOMMENDED THICKNESS

Spreading Rate per coat:

Wet microns	340 microns
Dry microns	200 microns
Theoretical Coverage	2.94 m ² /ltr*

* This figure makes no allowance for surface profile, uneven application, overspray or losses in containers and equipment. Film thickness will vary depending on actual use and specification.

PRACTICAL APPLICATION RATES - MICRONS PER COAT

	Airless Spray *	Conventional Spray	Brush #
Dry	75	75	150 - 200
Wet	125	125	255 - 340

* Maximum sag tolerance with overlap typically 508µm wet (300µm dry) by airless spray.

The actual thickness within the quoted range will depend on many variables including ambient conditions and operator expertise. To ensure full obliteration and maximum opacity, additional coats may be required for safety colours.

RECOMMENDED USE

Finish coat for exterior exposed surfaces where retention of gloss is required, and the use of isocyanate products is precluded or undesirable.

Normally used in conjunction with epoxy primers and undercoats.

RECOMMENDED APPLICATION METHODS

Airless Spray
Brush
Conventional Spray

Thinning of up to 5% vol may be required for spray application

Cleanser/Thinner: No 5

RECOMMENDED PRIMERS

Compatible with a wide range of Macropoxy, Dura-plate, Zinc Clad Epoxy Primers and Buildcoats.

ACROLON 1850 must be applied over epoxy materials within 4 days at 23°C to ensure satisfactory intercoat adhesion.

For use with alternative undercoats please contact Sherwin-Williams

RECOMMENDED TOPCOATS

Indefinitely self-overcoatable.

PACKAGE

A two component material supplied in separate containers to be mixed prior to use

Pack Size: 5 and 20 litre units when mixed.

Mixing Ratio 2 parts base to 1 part additive by volume.

Weight: White 1.42 kg/litre (may vary with shade).

Shelf Life: 18 months from date of manufacture or 'Use By' date where specified.



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SURFACE PREPARATION

Ensure surfaces to be coated are clean, dry and free from all surface contamination.

APPLICATION EQUIPMENT

Airless Spray

Nozzle Size	:	0.33mm (13 thou)
Fan Angle	:	40°
Operating Pressure	:	176kg/cm ² (2500 psi)

The airless spray details given above are intended as a guide only. Details such as fluid hose length and diameter, paint temperature and job shape and size all have an effect on the spray tip and operating pressure chosen. However, the operating pressure should be the lowest possible consistent with satisfactory atomisation. As conditions will vary from job to job, it is the applicators' responsibility to ensure that the equipment in use has been set up to give the best results. If in doubt Sherwin-Williams should be consulted.

Conventional Spray

Nozzle Size	:	1.27mm (50 thou)
Atomising Pressure	:	3.5kg/cm ² (50 psi)
Fluid Pressure	:	0.7kg/cm ² (10 psi)

The details of atomising pressure, fluid pressure and nozzle size are given as a guide. It may be found that slight variations of pressure will provide optimum atomisation in some circumstances according to the set up in use. Atomising air pressure depends on the air cap in use and the fluid pressure depends on the length of line and direction of feed i.e. horizontal or vertical.

Brush

The material is suitable for brush application.

APPLICATION CONDITIONS AND OVERCOATING

This material should preferably be applied at temperatures in excess of 10°C. In conditions of high relative humidity, ie 80-85% good ventilation conditions are essential. Substrate temperature shall be at least 3°C above the dew point and always above 0°C.

At application temperatures below 10°C, drying and curing times will be significantly extended, and spraying characteristics may be impaired. Application at ambient air temperatures below 5°C is not recommended.

Steelwork coated with ACROLON 1850 Special Finish should be protected from weather for 6 hours after application.

ADDITIONAL NOTES

Drying times, curing times and pot life should be considered as a guide only.

The curing reaction commences immediately when the two components are mixed, and since the reaction is dependent on temperature, the curing time and pot life will be approximately halved by a 10°C increase in temperature and doubled by a 10°C decrease in temperature.

Tropical Use

ACROLON 1850 at the time of mixing should not exceed a temperature of 35°C. Use of this product outside its pot life may result in inferior adhesion properties even if the material appears fit for application. Thinning the mixed product will not alleviate this problem.

It is not advisable to apply this coating when the air and substrate temperatures exceed 45°C. These conditions can introduce paint film formation defects, such as dry spray, bubbling and pinholing etc.

Numerical values quoted for physical data may vary slightly from batch to batch.

HEALTH AND SAFETY

Consult Product Health and Safety Data Sheet for information on safe storage, handling and application of this product.

WARRANTY

Any person or company 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 Sherwin-Williams can accept no liability for the performance of the product, or for any loss or damage arising out of such use.

The information detailed in this Data Sheet is liable to modification from time to time in the light of experience and of normal product development, and before using, customers are advised to check with Sherwin-Williams, quoting the reference number, to ensure that they possess the latest issue.