



Automotive Window Film

Sigma Pro Series

Data Sheet

Introduction

Sigma Pro is a premium, color stable, non-reflective automotive film range that utilizes nano-technology to replace traditional layers of metal with a fusion of nanoparticles deep within the film. This provides high performance, durable color, great handling, and a glare and metal-free product. The result is a high solar protection, providing cool and comfortable interior, long-lasting low reflectance graphite look, good installation features and the avoidance of any interference with electronic appliances. Sigma Pro is available in a range of four light transmissions, from high privacy 05% through to a light 50%.

Typical Usage

Sigma Pro is a non-reflective film designed for automotive window tinting. The film must be applied on the internal side of the windows of vehicles by employing wet application techniques.

Before the application of the film, the user shall determine if the intended use is in compliance with the applicable laws and regulations related to automotive window tinting films, assuming all risk and liability in connection therewith.

Product Construction

Face: 38 micron (1.5 mil) Graphite PET- Nanotechnology combined with UV stable dye

Adhesive: Permanent - Solvent based acrylic

Liner: PET

Certificates

- Allgemeine Bauartgenehmigung (ABG) - ABG number D 5667*02
- Portuguese homologation
- Spanish homologation
- Czech homologation



Key Features

- Premium non-reflective film - Sigma Pro is glare and metal free, providing no interference with electronic equipment.
- Apply fast - Sigma Pro provides great ease of handling, shrink and installation features.
- Feel cool - Sigma Pro automotive films filter heat and glare for a more pleasant passenger experience and reduced air-conditioning load.
- Look cool - Choose from a variety of shades and light transmission levels to give your vehicle a custom appearance. Superior aesthetics, excellent clarity and color stability.
- Protect Yourself- Sigma Pro rejects 99% and over of harmful UV radiation*.
- Protect your car - Protect trim, upholstery, carpets and fittings from the heat, light and UV radiation that cause fading, so your car looks better longer and maintains its value.
- Stay Safe - Sigma Pro films can help reduce the risk of injury from broken glass caused by projectiles, minor accidents or road debris.
- Stay Private - Tinted films keep your possessions out of sight.
- Stop Squinting - Cuts glare from the sun or from headlights to reduce eyestrain on long trips and in busy city traffic.

Self-life

When stored in original packaging upon arrival at the customer: 2 years. Recommended Storage conditions are 20 °C (± 2 °C) with 50 %RH (± 5 %)



Hanita Coatings

Film Performance

Durability in Years**: 5 Years

	Sigma Pro 05	Sigma Pro 20	Sigma Pro 36	Sigma Pro 50
Visible Light Transmitted %	6 %	22 %	67 %	52 %
Visible Light Reflected	7 %	7 %	8 %	8 %
UV Block %	99 %	99 %	99 %	99 %
Total Solar Energy Reflected %	7 %	7 %	7 %	8 %
Total Solar Energy Transmitted %	25 %	37 %	45 %	55 %
Total Solar Energy Absorbed %	68 %	56 %	48 %	37 %
IR Energy Rejection %	43 %	37 %	34 %	29 %
Selective IR Rejection	60 %	50 %	46 %	39 %
Glare Reduction %	94 %	76 %	58 %	39 %
Shading Coefficient	0.50	0.60	0.68	0.74
Total Solar Energy Rejected	57 %	48 %	41 %	36 %

*Note: Performance results are calculated on 6mm clear glass using NFRC methodology and LBNL Window 5.2 software, and are subject to variations in process conditions within industry.

Disclaimer

** Warranted Durability: The durability is based on middle European exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing south; in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased. With regard to Avery Dennison Architectural Window Film Products, the durability shall not differ between the climatic zones, but the same durability shall apply to all climatic zones. Information on physical and chemical characteristics is based upon tests we believe to be reliable. The values listed herein are typical values and are not for use in specifications. They are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of this material to their specific use

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