



CLEARSHIELD® PRO HYDRO

PAINT PROTECTION FILM

Clearshield® Pro Hydro Technical Data Sheet

The next generation in paint protection film

Solar Gard's Clearshield Pro Hydro is a virtually invisible paint protection film that protects your vehicle's paint from damages of everyday driving, maximizing your vehicle's re-sale value.

FEATURES:

- Advanced hydrophobic low surface energy coating
- Thick, virtually invisible high grade polyurethane barrier
- Highly formable material makes it easy to wrap edges, bumpers and mirrors reducing seams and relief cuts
- Available in a wide range of widths for large applications like full hoods
- Waste-saving blue contrast liner makes it easy to see cut lines, helping to save time, material and money
- High gloss with smooth surface

WARRANTY:

Clearshield Pro Hydro delivers superior protection with a 5-year limited manufacturer's warranty, that the film:

- Will remain optically clear and stay in place
- Won't crack, peel, or bubble
- Warrantied against yellowing and other manufacturer defects

BENEFITS:

- Advanced hydrophobic coating - increased anti water spotting properties to maintain the perfect finish for years
- Self-healing - Film heals itself from common light surface scratches and swirl marks that occur during routine car washing
- Protects surfaces from damage caused by gravel, sand, stones, road salt and insects
- Best-in-class stain resistance - low surface energy makes it difficult for organic compounds to stick to the film
- Easy maintenance - wash and dry. No wax needed to protect film finish
- High gloss surface and optical clarity allows original paint color to shine through
- In the unlikely event that the product is damaged, it can be easily peeled away exposing undamaged factory paint like the day Clearshield Pro Hydro was installed



Now more than ever, it is important that vehicles look new longer to hold resale value and keep the vehicle in style. Clearshield Pro Hydro; the best protection you'll never see!

| | TEST ITEM | TEST METHOD | NOMINAL VALUE |
|---------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| PHYSICAL PROPERTIES | TPU thickness | Micrometer | 6 mil (150 microns) |
| | Product thickness (HC+TPU+PSA) | Micrometer | 8 mil (200 microns) |
| | Release liner thickness | Micrometer | 3 mil (75 microns) |
| | Tensile strength at break | ASTM D882 | 6,800 lbs./in ² (478 kg/cm ²) |
| | Elongation at break | ASTM D882 | 400% |
| | Break strength | ASTM D882 | 54 lbs./in (95 N/cm) |
| ADHESION | Gloss | Adhered to paint panel. 60° gloss per ASTM D523 | 90 GU |
| | Initial dry peel adhesion | Dry Adhered to paint panel, 20 min at 72°F (22°C) | 1,100 g/in (4.3 N/cm) |
| | Initial wet peel adhesion | Dry Adhered to paint panel, 20 min at 72°F (22°C) | 1,100 g/in (4.3 N/cm) |
| | After heat age peel adhesion | Adhered to paint panel, 3min at 248°F (120°C) | >2100 g/in (8.2 N/cm) |
| | Adhered state shrinkage | Adhered to paint panel for 48hrs at 176°F(80°C) | < .02% |
| AGING TEST | Accelerated weathering | ASTM G155 Cycle 7, 3,000 hrs | Pass, NDE |
| | Heat Aging | Adhered to paint panel, 176°F(80°C) for 16 days | Pass |
| IMPACT RESISTANCE | Chip resistance | SAE J400 (Gravelometer) | Pass, no ruptures |
| CHEMICAL RESISTANCE | Soap & water | Samples submerged in chemical for 30 minutes followed by visual inspection in 24 hrs. | Pass, NDE |
| | White vinegar | | Pass, NDE |
| | Motor oil | | Pass, NDE |
| | Acetone | | Pass, NDE |
| | IPA | | Pass, NDE |
| STAIN RESISTANCE | Sharpie Marker | Lines were drawn on the film with a permanent Sharpie marker. Each line was wiped with a dry towel at 5, 15 min and 24 hr intervals. | No Visual Residue |
| | Tea | Sample was submerged in tea solution for periods of 5, 15 min and 24 hrs. Samples were removed and wiped with a dry towel. | No Visual Residue |

HC = Hard Coat, TPU = Thermal Plastic Polyurethane, PSA = Pressure Sensitive Adhesive

Adhesion: 180° peel on Instron tensile tester

NDE: No Detrimental Effect

Note: all values are nominal values and should not be used for specification purposes

Shelf life:


Solar Gard recommends using Clearshield Pro Hydro within one year from date of purchase.

Optimum storage conditions for Clearshield Pro Hydro are 40°F (4°C) to 90°F (32°C), and 40% to 60% relative humidity.

www.solargard.com

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