

# AST-1 Coating Specification Data Sheet

## Physical Characteristics:

|           |             |
|-----------|-------------|
| Viscosity | 22-24 cps   |
| W.P.G.    | 9.3         |
| Odor      | Mild        |
| Color     | Water White |

**Performance:** (all tests performed after application and cure using the Ultra Optics M/R III Coating System)

**Tint test** 55% Transmission  
(15 minutes at 95 - 100°C, Black BPI)

**Refractive Index** 1.485-1.5

**Bayer Abrasion:** UO Testing: 2.6 Colts: 2.6 NSL: 3.3 I Coat: 3.8

**Tumble Test:** UO Testing: 2.7 Colts: 2.5 NSL: 2.4 I Coat: N/A

**Taber Abrasion:** ASTM D1004-08  
500<sub>g</sub> Load, 500 cycles 1.01% Haze  
CS 10 F wheel

**Boiling DI H2O test:** Pass Polycarbonate and 1.67 Hi-Index

**Weathering Testing (CHOCA):** 3 cycles passed, 2 year simulation

**Yellow Index:** .75  
(CR-39 reference: .66)

**Adhesion after tint, tape 3M 600**

**ASTM D3359-92 (a)**

**Material:**

|                          |      |
|--------------------------|------|
| Polycarbonate (surfaced) | 100% |
| Hi Index 1.56 (surfaced) | 100% |
| Hi Index 1.60 (surfaced) | 100% |
| Hi Index 1.66 (surfaced) | 100% |
| Hi Index 1.67 (surfaced) | 100% |
| Hi Index 1.70 (surfaced) | 100% |

**Note:** Adhesion also 100% on above substrates using “snap test”