

POLYCARBONATE TEST DATA

Environmental Exposure

	Unexposed	Humidity (1)
Light Transmittance (%) (2)	91	91
Haze (%) (3)	0.4	0.5
Adhesion (%) (4)	100	100
Yellowness Index Change (5)	0	0

- Humidity: 120 hours @ 52°C and 100% RH (ASTM D-2247)
- Light Transmittance: ASTM D-1003
- Haze: ASTM D-1003
- Adhesion: ASTM D-3359
- Yellowness Index: ASTM D-1925

Scratch/Abrasion Tests

	Haze Change (3)	
	Uncoated	Coated
Steel-Wool Scratch (6)	28.1	0.4
Taber Abrasion (7) 100 Cycles	32.0	3-4

- Steel-Wool Scratch: Steel-wool rotary test representing severe scratching using a 1.25-square-inch #0000 steel-wool pad at 24 psi for 100 rotations
- Taber Abrasion: ASTM D-1044 (CS10F wheels with 500g load)

Chemical Resistance (8), (9)

	Uncoated	Coated
Gasoline	X	M
Toluene	X	S
Acetone	X	S
Ethanol	L	L
Trichloroethylene	X	S
5% Ammonia	S	S
10% Caustic Soda	S	S
50% Caustic Soda	X	S
10% Sulfuric Acid	L	L

- Chemical Resistance: Similar to ASTM D-1308 but more severe (evaporation minimized) through continuous contact with reagent by means of a pad in the mouth of an inverted bottle placed on the specimen
- L—Long-term contact, greater than 24 hours
M—Medium-term contact, up to 8 hours
S—Short Term contact, up to 1 hour
X—Immediate attack: do not use



VUEGUARD 901®

Vueguard 901® coating treatment is available as Water-Clear (WC) and Anti-Glare (AG) for plastic sheet and molded articles, offering superior resistance to scratching and abrasion.

While Vueguard 901® has been designed primarily for acrylic (poly-methylmethacrylate) and polycarbonate substrates, other plastics may benefit from its application.



ACRYLIC TEST DATA

Environmental Exposure

	Unexposed	Humidity (10)
Light Transmittance (%) (11)	91	91
Haze (%) (12)	0.2	0.4
Adhesion (%) (13)	100	100
Yellowness Index Change (14)	0	0

10. Humidity: 120 hours @ 52°C and 100% RH
 11. Light Transmittance: ASTM D-1003
 12. Haze: ASTM D-1003
 13. Adhesion: ASTM D-3359
 14. Yellowness Index: ASTM D-1925

Scratch/Abrasion Tests

	Haze Change (3)	
	Uncoated	Coated
Steel-Wool Scratch (15)	31.1	0.4
Taber Abrasion (16) 100 Cycles	26.2	3-4

15. Steel-Wool Scratch: Steel-wool rotary test representing severe scratching using a 1.25-square-inch #0000 steel-wool pad at 24 psi for 100 rotations
 16. Taber Abrasion: ASTM D-1044 (CS10F wheels with 500g load)

Chemical Resistance (17), (18)

	Uncoated	Coated
Gasoline	L	L
Toluene	X	S-M
Acetone	X	S
Ethanol	L	L
Trichloroethylene	X	S-M
5% Ammonia	L	L
10% Caustic Soda	L	L
50% Caustic Soda	L	L
10% Sulfuric Acid	L	L

17. Chemical Resistance: Similar to ASTM D-1308 but more severe (evaporation minimized) through continuous contact with reagent by means of a pad in the mouth of an inverted bottle placed on the specimen
 18. L—Long-term contact, greater than 24 hours
 M—Medium-term contact, up to 8 hours
 S—Short Term contact, up to 1 hour
 X—Immediate attack: do not use

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Additional Substrate Material

ABS
 Polyetheretherketone
 CR-39
 Polyphenylene Sulfide
 Polyamide
 Polysulfone
 Polyarylate
 Polystyrene
 Polyester
 Metallized Plastic
 Polyethersulfone
 SAN

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