

AMGARD scratch-resistant polycarbonate sheet

ANTIMICROBIAL

AMGARD scratch-resistant polycarbonate sheet is formulated with silver ion antimicrobial technology that protects the sheet surface from microorganism growth and remains active for the entire life of the product. The proprietary coating provides enhanced abrasion resistance to polycarbonate's inherent performance benefits of impact strength and clarity. The antimicrobial coating also adds exceptional resistance to common disinfecting cleaning chemicals. The result is a highly durable and tough antimicrobial sheet that can stand up to today's demanding safety barrier environments.

- » Inhibits microbe surface degradation
- » Independent laboratory tested
- » Abrasion resistant
- » Chemical resistant
- » Half the weight of glass
- » Virtually unbreakable
- » Easy to fabricate and clean

APPLICATIONS

Durable protective barriers, office partitions, safety enclosures, interior windows and glazing

Typical Properties*

Property	Test Method	Units	Values
PHYSICAL			
Specific Gravity	ASTM D792	-	1.2
Light Transmission, Clear @ 0.118"	ASTM D1003	%	88
Taber Abrasion @ 100 Cycles, Delta Haze CS-10F Wheel @ 500 g load	ASTM D1044	%	4
MECHANICAL			
Tensile Strength, Ultimate	ASTM D638	psi	9,500
Tensile Strength, Yield	ASTM D638	psi	9,000
Tensile Modulus	ASTM D638	psi	340,000
Flexural Strength	ASTM D790	psi	13,500
Flexural Modulus	ASTM D790	psi	345,000
Compressive Strength	ASTM D695	psi	12,500
Compressive Modulus	ASTM D695	psi	345,000
THERMAL			
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	3.75 x 10 ⁻⁵
Heat Deflection Temperature @ 264 psi	ASTM D648	°F	270
Heat Deflection Temperature @ 66 psi	ASTM D648	°F	280
FLAMMABILITY			
Ignition Temperature, Self	ASTM D1929	°F	1022
Ignition Temperature, Flash	ASTM D1929	°F	824

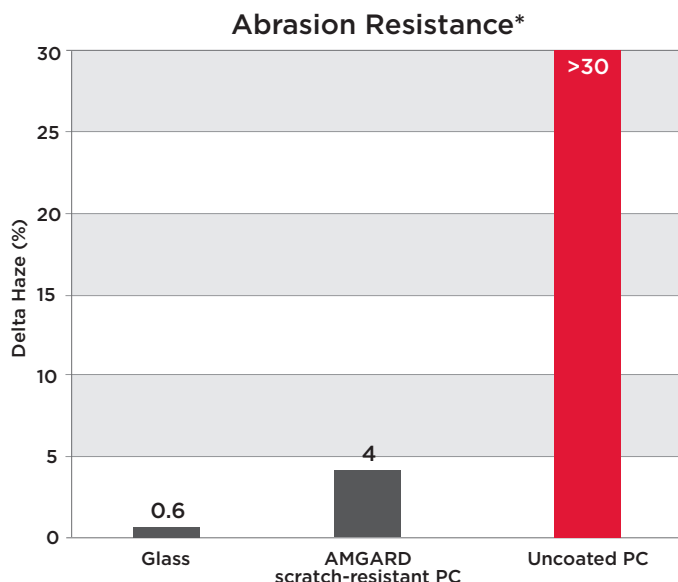
*Typical properties are not intended for specification purposes

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AMGARD SOLVENT RESISTANCE

Acetone	No change to sheet
Ethyl acetate	No change to sheet
Toluene	No change to sheet
Amyl acetate	No change to sheet
Hydrogen peroxide (3%)	No change to sheet
Ethanol (100%)	No change to sheet
Isopropyl alcohol (99%)	No change to sheet

16 hour "watch glass" covered surface exposure, CSA B45.5 / IAPMO Z124, clause 5.15



*Taber Abrasion per ASTM D 1044, 100 cycles using CS-10F wheels at 500 g load

AMGARD CLEANING / RUBBING RESISTANCE

Cleaner	Coating Appearance	
	Microfiber Cloth	Paper Towel
Clorox® Splashless® Bleach	No change to sheet	No change to sheet
Clorox® Plus Tilex® Mold & Mildew Remover	No change to sheet	No change to sheet
CLR® Bath & Kitchen Foaming Action Cleaner	No change to sheet	No change to sheet
Fantastik® Disinfectant Multi-Purpose Cleaner	No change to sheet	No change to sheet
Lysol® Power Bathroom Cleaner	No change to sheet	No change to sheet
Mean Green® Super Strength Cleaner & Degreaser	No change to sheet	No change to sheet
Scrubbing Bubbles® Mega Shower Foamer	No change to sheet	No change to sheet
Scrubbing Bubbles® Foaming bleach	No change to sheet	No change to sheet
Simple Green® All-Purpose Cleaner	No change to sheet	No change to sheet
Windex®	No change to sheet	No change to sheet

Taber linear abraser, 900 cycle, 600 gram load; Microfiber or Paper Towel saturated with cleaner

Solvent and cleanser resistance applies to coated sheet surface only. Care must be taken to not expose uncoated sheet edges to harsh chemicals and cleaners. Do not use scrapers, squeegees, razors or other sharp instruments that may scratch through the coating.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determines the suitability of our materials and suggestions before adopting them on a commercial scale.