

Mar-Con® AS Acrylic Framing Grade Glazing

Description

Mar-Con® AS Acrylic is a mar resistant/antistatic Dual - Coat™ glazing for framing art, memorabilia, photographs, and documents, and for fabrication of shadow box assemblies, museum cases and displays. It is a premium optical quality acrylic sheet coated with two cured high performance, permanent, non-contaminating coatings developed by SciCron Technologies. The front side is coated with Mar-Con® mar resistant coating, and the back side with an antistatic coating. This combination yields a glazing product with excellent resistance to marring and scratching on the front side and virtually no static charge generation on the back side. **Mar-Con AS Acrylic** is a superior framing glazing that exhibits excellent optical properties, shatter resistance, and chemical resistance. It fabricates simply, weighs less than half the weight of glass of the same thickness, and is available in large sheet sizes.

Framing and Display Case Applications

Mar-Con AS Acrylic combines several features that make it an ideal premium glazing for framing and display cases. On the front side, the hard Mar-Con coating helps prevent damage from cleaning and moderate handling abuse. This chemically resistant surface also helps protect the plastic from cleaning solutions and repeated wipe downs, thereby extending the useful life of the glazing. On the back side, the antistatic coating minimizes static charge generation normally associated with acrylic glazing. This prevents static charge induced damage to framed documents and fine art by preventing charge generated attraction of pigments and inks from art surfaces. This can be particularly important when framing printed documents, pastels, chalk art and charcoal art. In addition, the antistatic surface greatly simplifies frame assembly by preventing static charge attraction of particulates to the back side of the glazing. Charge attraction of contaminating particulates from the air is a well-known framing bottleneck, particularly in low humidity environments. A UV light screening conservation grade **Mar-Con AS Acrylic** is also available to prevent UV light induced aging of framed art and documents.

Fabrication

Mar-Con AS Acrylic is easily fabricated using the same equipment and fabrication techniques generally employed with uncoated acrylic sheet products. Fabrication procedures should be carried out with the protective masking left on the sheet surfaces to minimize the possibility of damage. Use of inappropriate equipment and tools, not designed for plastic fabrication, can result

Mar Resistant/Antistatic Dual-Coat™ Pastel Compatible

in melting, cracking, or shattering of the plastic substrate during cutting and fabrication procedures. This can damage the plastic permanently and could result in serious injury to equipment operators. **Always observe appropriate safety precautions when fabricating SciCron Technologies products.** Contact SciCron Technologies or your distributor for information about appropriate equipment and fabrication procedures.

Features and Benefits

- *Effective antistatic hard coat type back surface*
Prevents attraction of particulates during and after frame assembly, while reducing the chance of marring or scratching during fabrication and assembly.
- *Humidity independent static charge control*
Prevents static charge induced damage to printed materials and fine art even in very low humidity conditions.
- *Hard, mar resistant, durable front surface*
Reduces risk of damage to the glazing surface from cleaning and handling.
- *Premium optical quality acrylic sheet*
Minimizes distortion, allowing art to be viewed naturally.
- *Inherently lightweight, shatter-resistant plastic in large sheet sizes*
More versatile, safer, and easier to handle than heavy, fragile glass.
- *Excellent chemical resistance*
Resists damage from cleaning solutions and solvents, which would dull and otherwise harm uncoated plastic.
- *Superior fabrication and solvent welding characteristics*
Cuts and assembles simply without the breakage losses of glass.

Availability

Mar-Con AS Acrylic is available in standard and UV light filtering conservation grades in both cell cast and extruded acrylic types.

Standard Dimensions

Thickness:

0.098" (2.5mm), 0.118" (3mm), 0.177" (4.5mm), 0.236" (6mm)

Sheet Size: 48" x 96"

Cut-to-size sheets available upon request.

Note: A single side coated glazing product having an antistatic back surface to prevent charge generated damage to sensitive art is also available as SciCron® AS Acrylic.

Made in USA

The information and statements contained herein are believed to be accurate, however, users should perform their own testing and verification to determine the durability, applicability and suitability of the products for their own purposes. NOTHING CONTAINED HEREIN SHALL BE CONSTRUED AS A REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, or as permission, inducement, or recommendation to practice any patented invention without license. IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY EXCLUDED. While SciCron Technologies' surface is more mar resistant than the original substrate, the term "Permanent" or "Permanence" is not intended as a guarantee of durability in any particular application. It is used to distinguish SciCron Technologies' surface from topical anti-stats, which must be reapplied on a regular basis.

Mar-Con® AS Acrylic

Typical Physical Properties (Typical but not guaranteed values for 0.25 inch material)

Property	Test Method	Units	Mar-Con AS Acrylic
Physical			
Specific Gravity			
Mar-Con AS Acrylic Glazing	ASTM D792	--	1.19
Typical Glass Glazing	ASTM D792	--	2.60
Pencil Hardness			
Mar Resistant (Mar-Con) Front Surface	ASTM D3363	Hardness Scale	6H
Antistatic Back Surface	ASTM D3363	Hardness Scale	4H
Mar Resistance			
Mar Resistant (Mar-Con) Front Surface			
Weighted Steel Wool Rub Resistance ¹	Internal	Visual Scratches	None
Steel Wool Rub Resistance ²	Internal	Visual Scratches	None
Antistatic Back Surface			
Weighted Steel Wool Rub Resistance ¹	Internal	Visual Scratches	Light
Steel Wool Rub Resistance ²	Internal	Visual Scratches	Light
Thermal			
Maximum Continuous Service Temperature	--	°F	160
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	4.0 x 10 ⁻⁵
Coefficient of Thermal Conductivity	Cenco-Fitch	BTU•in/hr•ft ² •°F	1.3
Water Absorption			
24 Hour Immersion (73°F)	ASTM D570	%	0.2
Optical			
3mm Transparent Clear Transmittance - Total	ASTM D1003	%	88
Haze	ASTM D1003	%	Less than 1.0
Antistatic Electrical			
Properties of Antistatic Surface			
Surface Resistivity	ASTM D257	ohms/sq	10 ⁸ - 10 ¹⁰
Triboelectric Charge Generation ³	EIA 625	volts	Less than 200

1. Test conditions - 14 strokes of #0000 steel wool under a 2 pound (908 gram) rounded point load

2. Test conditions - 5 seconds of vigorous rubbing with #0000 steel wool

3. The EIA 625 Standard requires that "antistatic materials shall not triboelectric charge to greater than ±200 volts under normal intended usage"

Cleaning Instructions Front and Back Surfaces

The following solvents and cleaning liquids were found to be effective under laboratory conditions.

For ordinary dirt and grime, aqueous solutions of Joy® or Formula 409®, or spray-on commercial window cleaners like Windex® and Fantastic®, can be applied carefully with a soft cloth or sponge.

Rinse with clean water before drying with a chamois or cellulose sponge.

For stubborn stains it is possible to use one of the following solvents applied carefully with a soft cloth or sponge: isopropyl alcohol, methanol, hexane, aliphatic naphtha, kerosene, or butyl cellosolve (for paints, inks, etc.)

Always remove residual solvent with soapy water and a final rinse with clean water.

Never use an abrasive cleaner or scouring pad.

Precautions:

Acrylic plastic is a combustible thermoplastic. Avoid exposure to flame and excessive heat. Observe fire precautions appropriate for comparable forms of wood and paper.