

Lexan* MR101LG Sheet

Product Datasheet

Description

One Side Coated Mar/UV-resistant Lexan MR101LG sheet combines the impact strength of Lexan polycarbonate sheet with a proprietary abrasion/UV resistant surface that approaches glass in performance. Lexan MR101LG Sheet with Margard* coating is the only polycarbonate material backed by a ten-year limited warranty against yellowing, abrasion resistance, breakage, loss of light transmission, and coating failure.[£])

Lexan MR101LG One Side Hard Coated Sheet is a great candidate for all Lamination Applications. Our unique coating is graffiti-resistant enabling restoration to a like-new condition. In addition, Lexan MR101LG sheet offers improved resistance to weathering as well as forced-entry protection. It is well-suited for use in stores, public buildings, schools, bus shelters and other high traffic areas. Lexan MR101LG sheet is for transparent applications only. Because of its high mar-resistant surface, paint, adhesives and other materials will not adhere to its surface. Due to its mar-resistant coating, Lexan MR101LG sheet cannot be cold-formed. For Transportation Applications please order MR101LGT with ripple orientation.

Typical Property Values ♦

| Property | Test Method | Unit | Value |
|--|-------------|----------|-------------------------|
| Physical | | | |
| Specific Gravity | ASTM D792 | – | 1.20 |
| Light Transmission (Average), 1/8" Thick | ASTM D1003 | % | 86 |
| Chemical Resistance | ANSI Z26.1 | - | Passes [#] |
| Mechanical | | | |
| Tensile Strength, Ultimate | ASTM D638 | psi | 9,500 |
| Flexural Strength | ASTM D790 | psi | 13,500 |
| Flexural Endurance @ 1,800 Cycles/Min, 73°F, 50% RH | ASTM D671 | psi | 1,000 |
| Compressive Strength | ASTM D696 | psi | 12,500 |
| Modulus of Elasticity | ASTM D638 | psi | 340,000 |
| Drop Ball Impact Strength [‡] | SABIC Test | ft-lbs | |
| @ 73°F | | | >200 |
| @ 32°F | | | >200 |
| @ 0°F | | | >200 |
| Thermal | | | |
| Coefficient of Thermal Expansion | ASTM D696 | in/in/°F | 3.75 x 10 ⁻⁵ |
| Heat Deflection Temperature @ 264 psi | ASTM D648 | °F | 260 |
| Flammability | | | |
| Horizontal Burn (Flame Spread) AEB | ASTM D635 | in | <1 |
| Ignition Temperature Flash Self | ASTM D1929 | °F | 873 1,076 |

♦ These typical values are not intended for specification purposes. If minimum certifiable properties are required please contact your local SABIC Innovative Plastics' representative.

[‡] 5-lb steel ball dropped from a height of 40 feet

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£ Request details of limited ten-year warranty plus cleaning and maintenance instructions.

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Abrasion Resistance Comparison

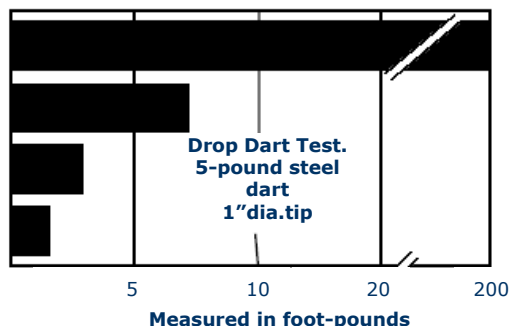
Lexan MR101LG sheet exhibits significantly less hazing than uncoated polycarbonate sheet as shown in the abrasion resistance chart.

| | Test Method | % Haze | | |
|-------------------------------------|----------------------|------------------------|---------------------|-------|
| | | Uncoated Polycarbonate | Lexan MR101LG Sheet | Glass |
| Taber Abrasion 100 Cycles CS 10F | ASTM D 1044 Z26.1 | 35.0 | 1-3 | 0.5 |

* The Taber Abrader test measures the percent of change in haze that results from the grinding action of two abrasive impregnated wheels on the test samples. A constant load of 500 grams is maintained as the samples rotate on a turntable for a predetermined number of revolutions.

Impact Resistance

¼" Lexan
MR101LG sheet
¼" Acrylic
¼" Tempered
Glass
¼" Laminated
Glass



Code Compliance

Lexan MR101LG sheet meets the requirements of all major model building codes

- Model Building Code Organizations: The Approved Light Transmitting Plastics requirements set by the three major Model Building Code organizations (BOCA, ICBO, and SBCCI) and Dade County. Lexan MR101LG sheet meets the highest rating—Class CC1 Approved Plastic.
- Underwriters Laboratories 972: Lexan MR101LG sheet is listed as a Burglary-Resisting Glazing Material according to UL Standard 972.
- CPSC: 16 CFR 1201, I, II: Lexan MR101LG sheet complies with the Consumer Product Safety Commission's Safety Standard for architectural glazing materials for both Category I and Category II applications.

Lexan* Tough
Polycarbonate Sheet Virtually
Unbreakable

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