



Makrolon® SL

Polycarbonate sheet with enhanced UV resistance for exterior signs

Makrolon SL sheet delivers over 20 times more impact resistance than standard and impact modified acrylic even at low temperature extremes.

Its toughness minimizes breakage during forming and fabrication, and costly damage that can occur during shipping and installation particularly in cold weather.

Once in place, sign faces made from tough Makrolon SL sheet project a positive image long term by withstanding high wind loads and impacts that put other sign face materials out of business.

High strength may also allow the use of thinner sections depending on the design, for lighter weight and even greater overall cost effectiveness.

In addition to its toughness, Makrolon SL sheet also offers:

- 10-year warranty on clear Makrolon SL for outdoor use
- Shorter cool-down time than acrylic in thermoforming, for significantly higher production rates

Temperature Resistance (ASTM D 648)

Material	Heat Deflection Temperature (°F) @ 66 psi	Heat Deflection Temperature (°F) @ 264 psi
Makrolon SL	280	270
Acrylic (PMMA)	190	181

Impact Resistance (ASTM D 3763)*

Material	Total Energy (ft·lbs)
Makrolon SL	> 46
Acrylic (PMMA)	2

*1/8" sheet

Bayer MaterialScience LLC produces Makrolon sheet products from Bayer Corporation's Makrolon polycarbonate resin



makrolon®
SL

Makrolon® LD light diffusing

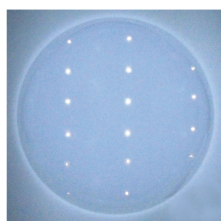
Polycarbonate sheet for electronic signs now available

Proprietary Diffuser Technology for Superior Diffusion Properties

- Eliminates LED hot spots in flat and formed applications
- Reduces light intensity fluctuations (shadowing/skeletoning)
- Allows for shallow channel letter design
- Superior diffusion with any standard light source: LED, neon, and fluorescent

Key Advantages of Polycarbonate

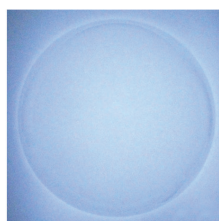
- Over 30 times the impact resistance of acrylic
- Superior flammability performance versus acrylic



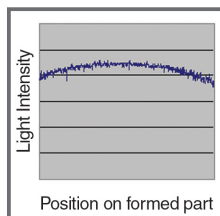
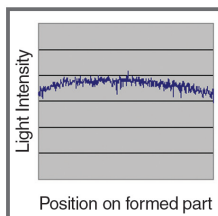
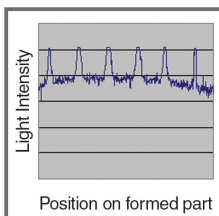
Competitive PC



Makrolon LD B27



Makrolon LD B48



Makrolon LD prevents hot spots even when formed to deep draws

4" deep formed domes—domed area is 50% of its original thickness after forming

Imaged under same lighting conditions

Light intensity across LED light string location

Offered in Industry Standard Sheet and Reels

Available Colors

- B27 white (7328)
- D96 Red (2283)
- F85 Blue (2051)
- B48 white (2447)
- D99 Red (2793)
- H87 Green (2108)
- C59 Orange (2119)
- F84 Blue (2114)
- M72 Yellow (2037)



Bayer MaterialScience

Bayer MaterialScience
119 Salisbury Road
Sheffield, MA 01257
Toll Free: 800.254.1707
Fax: 800.457.3553
sfdinfo@bayer.com
www.sheffieldplastics.com

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether our products, technical assistance and information are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent.