



Makrolon® LF sheet

Low flammability

Makrolon® LF sheet is a flame resistant, UV stabilized, transparent polycarbonate product. It features a UL 94 V-0 rating and meets FAR 25.853 (a), 1, (i) requirements at 0.080" and thicker. The product offers high impact strength, superior dimensional stability, high temperature resistance, and high clarity. This lightweight thermoformable sheet is also easy to fabricate and decorate.

Applications

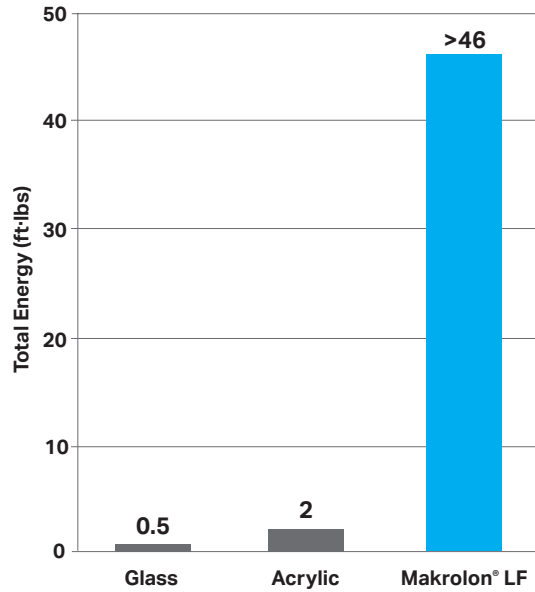
Electrical devices, equipment housings, switchgear covers, light fixtures

| Typical Properties* | | | |
|--|-------------------------|-----------|-------------------------|
| Property | Test Method | Units | Values |
| PHYSICAL | | | |
| Specific Gravity | ASTM D 792 | - | 1.2 |
| Light Transmission, Clear @ 0.118" | ASTM D 1003 | % | 86 |
| Haze, Clear | ASTM D 1003 | % | <1 |
| MECHANICAL | | | |
| Tensile Strength, Break | ASTM D 638 | psi | 9,500 |
| Flexural Strength | ASTM D 790 | psi | 13,500 |
| Compressive Strength | ASTM D 695 | psi | 12,500 |
| Modulus of Elasticity | ASTM D 638 | psi | 345,000 |
| Izod Impact Strength, Notched @ 0.125" | ASTM D 256 | ft-lbs/in | 15 |
| Izod Impact Strength, Unnotched @ 0.125" | ASTM D 256 | ft-lbs/in | 60 (no failure) |
| Instrumented Impact | ASTM D 3763 | ft-lbs | >46 |
| THERMAL | | | |
| Coefficient of Thermal Expansion | ASTM D 696 | in/in/°F | 3.75 x 10 ⁻⁵ |
| Heat Deflection Temperature @ 264 psi | ASTM D 648 | °F | 270 |
| Heat Deflection Temperature @ 66 psi | ASTM D 648 | °F | 280 |
| FLAMMABILITY | | | |
| Flame Class @ 0.080" | UL 94 | - | V-0 |
| FAA Flammability | FAR 25.853 | | |
| @ 0.080" - 0.250" | Part 1, a (i) - 60 sec | - | Pass |
| @ 0.080" - 0.250" | Part 1, a (ii) - 12 sec | - | Pass |

*Typical properties are not intended for specification purposes.

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Impact Resistance*



*Instrumented Impact per ASTM D 3763,
sample thickness 0.125" nominal

Agency and specification compliance

| | | |
|------------------------------------|-------------|--------------------------------|
| Polycarbonate sheet classification | A-A-59502 | Type II Class 1 |
| Polycarbonate resin classification | ASTM D 3935 | PC0120 |
| Flammability - Plastic component | UL 94 | UL File #E351891 |
| Flammability - FAA | FAR 25.853 | Part 1 60-second and 12-second |



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