

# AZCARB



## AZCARB FR Flame Resistant Polycarbonate Sheet

**AZCARB FR** is a polished surface, flame resistant, UV stabilized, high optic transparent polycarbonate sheet. It features a UL 94 V-0 rating and meets FAR 25.853 requirements at 0.080" and thicker. This product offers high impact strength, superior dimensional stability, high temperature resistance, and excellent clarity. This lightweight thermoformable sheet is also easy to fabricate and decorate. Applications include electrical devices, equipment housings, switchgear covers and light fixtures.

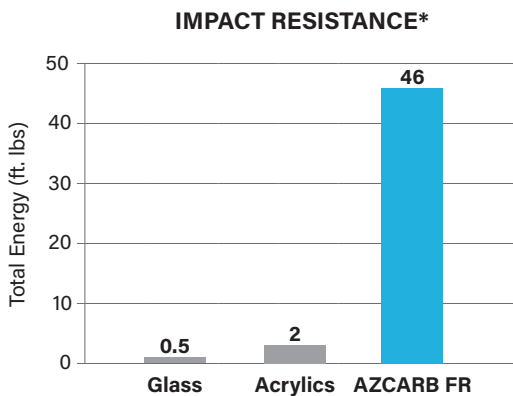
- UL 94 V-0 rating at 0.177" & 0.236"
- UL 94 V-2 at 0.080", 0.093" & 0.118"
- NFPA ASTM E84 Class A
- High Impact Strength – 200x stronger than glass and 20x stronger impact strength than standard Acrylic
- High clarity and light transmission
- Lightweight
- Recyclable
- Limited five (5) year warranty against breakage

## AZCARB FR Flame Resistant Polycarbonate Sheet

TYPICAL STANDARD PROPERTIES<sup>1</sup>

PROPERTY	TEST METHOD	UNITS	AZCARB GP
<b>PHYSICAL</b>			
Specific gravity	ASTM D792	N/A	1.2
Light transmission, clear @ 0.118"	ASTM D1003	%	87
Haze, clear	ASTM D1003	%	<1
<b>MECHANICAL</b>			
Tensile strength, break	ASTM D638	psi	9,500
Flexural strength	ASTM D790	psi	13,500
Compression strength	ASTM D695	psi	12,500
Modulus of elasticity	ASTM D638	psi	345,000
Izod impact strength, notched @ 1/8"	ASTM D256	ft-lbs/inch	15
Izod impact strength, unnotched @ 1/8"	ASTM D256	ft-lbs/inch	60 (no break)
Instrumental impact	ASTM D3763	ft-lbs	46
<b>THERMAL</b>			
Coefficient of thermal expansion	ASTM D696	in/in/°F	0.0000375
Heat deflection temperature @ 264 psi	ASTM D648	°F	270
Heat deflection temperature @ 66 psi	ASTM D648	°F	280
<b>FLAMMABILITY</b>			
Ignition temperature, self	ASTM D1929	°F	950
Ignition temperature, flash	ASTM D1929	°F	842
Flame class @ 0.080"	UL94	-	V-2
Flame Class @ 0.177"	UL94	-	V-0

<sup>1</sup> Values reported are averages and should not be used for specification purposes.



\* Instrumented Impact per ASTM D 3763.  
Sample thickness 0.125" nominal.

### REGULATORY CODE COMPLIANCE & CERTIFICATIONS

Polycarbonate sheet classification	A-A-59502	Type II Class 1
Polycarbonate resin classification	ASTM D 3935	PC0120
Flammability - plastic component	UL94	UL File # E528611

AZCARB FR Polycarbonate Sheet is a combustible thermoplastic. Observe fire precautions appropriate for comparable forms of wood and paper. For building uses, check code approvals. Impact resistance is a factor of thickness. Avoid exposure to heat or aromatic solvents. Clean with soap and water. Avoid abrasives. The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, AZPolymers expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.

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