

Uncoated ProLens™

Optical Grade Flame Retardant Polycarbonate Sheet.
Stock in 0.062", 0.080", 0.125" & 0.250".

Applications

Aircraft Window Dust Covers,
Lenses, Class Dividers

Material Class

A-A-59502 Classification
Type II Class 2

Colors

Clear, Bronze 5184, Grey 7122

PROPERTIES

TEST METHOD

VALUE

UNITS

Physical Properties

Specific Gravity	ASTM D 792	1.2	-
Water Absorption 73.4 F, 24 hr	ASTM D 570	0.1	%

Mechanical Properties

Tensile Strength	ASTM D 638	9717	psi
Elongation	ASTM D 638	73	%
Flexural Strength	ASTM D 790	14000	psi
Tensile Modules	ASTM D 790	327785	psi
Izod Impact (@.125")	ASTM D 256	18.9	ft-lbs/in
Rockwell Hardness	ASTM D 785	122	R-Scale

Optical Properties

Transmittance	ASTM D 1003	88	%
Haze	ASTM D 1003	2	%

DEFECTS

DEFECT SIZE

MAXIMUM PER SQUARE FOOT

Defect Properties

Pinholes, pits, dimples	.030"-.039"	0
	.020"-.029"	1
	.010"-.019"	5
Scratches/Fibers	.250" > (length)	0
	.250" < (length)	1

Inspection Criteria

Professional Plastics' inspection criteria to identify defects is to be inspected as follows:
Pro-Lens is to be vertically inspected at a 90 degree angle, from a distance of 24". Pro-Lens is to be inspected in 12" square area segments, with a maximum of 3 seconds per segment area inspection.

FLAMMABILITY

MAXIMUM REQUIREMENTS

RESULTS

Flammability-FAR 25.853(a) Appendix F(a)(F)(i)

Material results for 0.060"

Self Extinguish Time	15 seconds max	0 seconds
Burn Length	6"	0.10"
Average Drippings	3 seconds	0 seconds

Material also passes FAR 25.853(a) Appendix F(a)(1)(ii), 12 second vertical burn test