Safety Protection Glasses
Unit 11, Agnes Street Industrial Estate,
Belfast | BT13 1GB | Northern Ireland

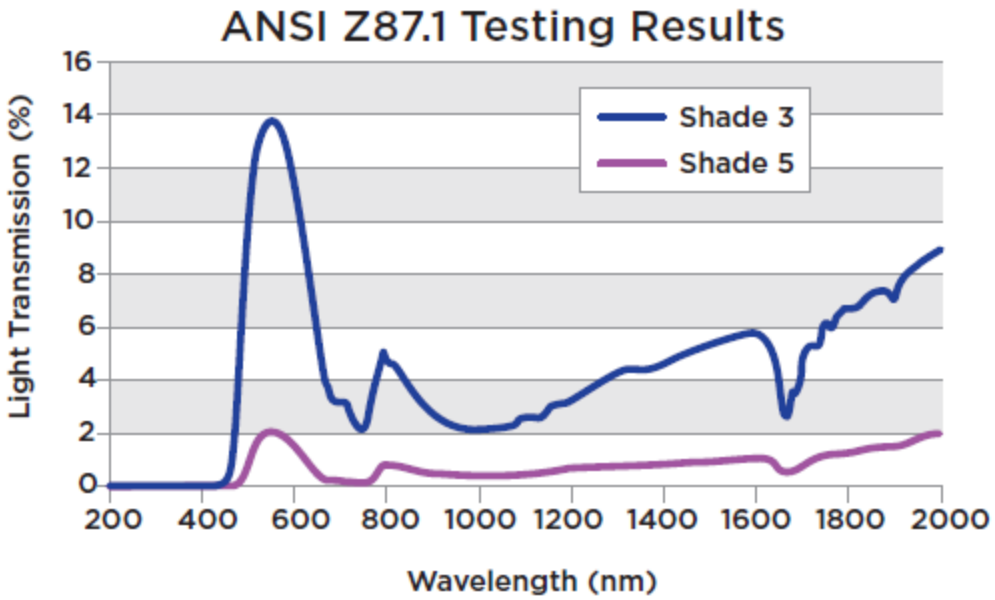
Welding Polycarbonate Sheets - Shades 3 and 5

Developed to meet ANSI Z87.1, EN 169, and CSA Z94.3 standards for face shield applications. Proprietary additive systems block UV and IR light providing protection during gas flame welding and cutting operations and meeting the requirements for welding shades 3 and 5.

Applications:

- Face shields for flame welding and cutting
- Welding Curtains and Screens

Light Transmission



January 2022

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Typical Properties*

Property	Test Method	Units	Values
PHYSICAL			
Specific Gravity	ASTM D 792	-	1.2
Water Absorption, 24 hrs	ASTM D 570	%	0.15
Poisson's Ratio	ASTM E 132	-	0.35
Light Transmission,			
Welding shades 3 and 5	ANSI Z87.1	-	Pass
	EN 169	-	Pass
	CSA Z94.3	-	Pass
Welding Curtain, Grade (D) Shade 5 for LT properties	AWS F2.3M:2011	-	Pass
MECHANICAL			
Tensile Strength, Break	ASTM D 638	psi	9,500
Tensile Strength, Yield	ASTM D 638	psi	9,000
Tensile Modulus	ASTM D 638	psi	340,000
Elongation	ASTM D 638	%	110
Flexural Strength	ASTM D 790	psi	13,500
Flexural Modulus	ASTM D 790	psi	345,000
Compressive Strength	ASTM D 695	psi	12,500
Compressive Modulus	ASTM D 695	psi	345,000
Instrumental Impact, 0.044"	ASTM D 3763	ft·lbs	18
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
ELECTRICAL			
Arc Resistance			
Stainless Steel Strip Electrodes	ASTM D 495	Seconds	10
Tungsten Electrodes	ASTM D 495	Seconds	120
Dielectric Strength, In air @ 0.125"	ASTM D 149	V/mil	380
FLAMMABILITY			
Ignition Temperature, Self	ASTM D 1929	°F	1070
Ignition Temperature, Flash	ASTM D 1929	°F	870

*Typical Properties are not for specification purposes