

Product Data - Infra-Red Acrylic



Infra-Red IRT Acrylic

IRT is a cell cast acrylic sheet specially formulated to get optical characteristics that can transmit infrared light and block ultraviolet (UV) and visible light.

IRT is recommended for projects that require transmission of infrared light starting at 750 nm. The product is opaque black and only transmits infrared light. This product is ideal for applications where it is necessary to hide security cameras or applications with an infrared emitter and receiver in electronic devices.

Advantages:

Infrared Light
Transmission (IRT)
Superior surface quality
and gloss

Thick tolerance +/- 15%

Typical Properties			
Property:	Unit:	Typical Value:	Method:
Physical - Mechanical			
Specific Weight	-	1.19	ASTM D 792
Tensile Strength	psi	9160	ASTM D 638
Elongation to rupture	%	8	ASTM D 638
Elasticity Modulus	psi	350600	ASTM D 798
Impact Resistance Izod		-	ASTM D 256
Rockwell Hardness		M 88 - 95	ASTM D 785
Thickness Tolerance: 2.0 mm (0.080") 3.0 mm (0.118")	mm	1.68 - 2.32 2.60 - 3.30	
Thermal			
Maximum Service Temperature		80.0 °C	
Deflection Temperature under load 264 psi		82.0 °C	ASTM D 648
Forming Temperature		140 - 180 °C	
Performance			
Water Absorption (24 hrs)	%	0.30%	ASTM D 570

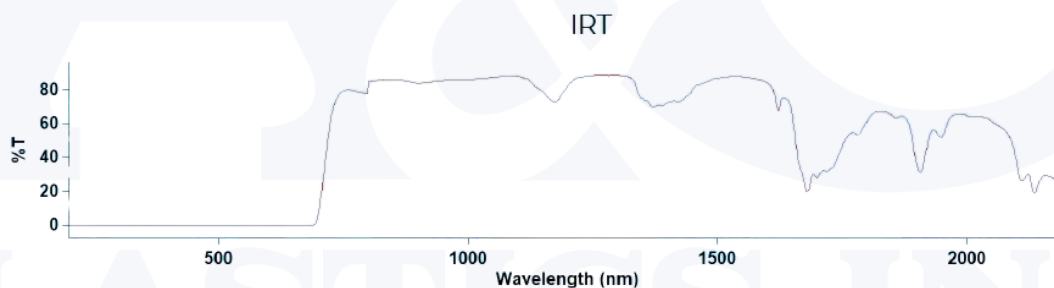
*Typical properties are not intended for specification purposes.

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Infrared Light Transmission (IRT)			
<u>Properties</u>	<u>Unit</u>	<u>Typical Value</u>	<u>Method</u>
Optical			
Transmission of visible light	%	0% @ 540 nm	ASTM D 1003
Transmission of UV light	%	0% @ 300 nm	ASTM D 1003
Transmission of Infrared (IR)	%	80% @ 750 nm 85% @ 800 nm 85% @ 900 nm	ASTM D 1003



External test: % of light transmission (200 - 2200 nm)

(*) All values are referred to IRT of 0.118". These values are typical and should not be taken as specifications. For any specific requirement please contact us.

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