

ANTIFLEX®-AR3/2h-ITO is ttv's precision cast acrylic sheet - **LUXACRYL®** - for applications with requirements of excellent optical quality, but with a special hard coat on both surfaces (pencil hardness 6 - 8 H) to enhance scratch resistance, a one-side non-glare coating and an open conductive ITO (Indium Tin Oxide) coating of approx. 30 Ω/□.

Surface Test applied: Sliding a weight (diameter 40 mm) of 250p - with a pad of steel wool #1 underneath - 3 times across the surface shall not cause any visible scratches.

Applications: Whenever scratch resistance of cast acrylic sheet (pencil hardness 2 to 3 H) does not meet the requirements; mainly as windows for any type electronic display, especially for LC and TFT displays where EMI/RFI shielding is required.

Sheet Size: Standard 550 x 400 mm; thicknesses from 0.5 mm to 5.0 mm (for off-the-shelf thicknesses see stock list). Thickness tolerance +/- 0.1 mm (for thicknesses up to 3.0 mm). ttv also supplies cut to size or machined to customer's drawings (including silk screen printing and adhesive).

Special Production: non-stock thicknesses and tints.

TECHNICAL DATA	TEST METHOD	UNIT	VALUE*
PHYSICAL			
Density	ASTM D-792	g/cm ³	1.19
Pencil Hardness	ASTM D-3363		approx. 6 – 8 H
OPTICAL			
Transmission	ASTM D-1003	%	approx. 80
Refractive Index	ASTM D-542		1.49
Haze		%	approx. 1.9
THERMAL			
Maximum Continuous Temperature		°C	80
Heat Distortion Temperature	ASTM D-648	°C	100
Coefficient of Thermal Expansion	ASTM D-696	1/°C	7 x 10 ⁻⁵
Coefficient of Thermal Conductivity	DIN 52612	W/mK	0.17
MECHANICAL			
Rupture Strength (tensile)	ASTM D-638	kg/cm ²	600
Rupture Strength (flexural)	ASTM D-790	kg/cm ²	800
Elongation	ASTM D-638	%	5
ELECTRICAL			
Surface Resistance		Ω/□	approx. 30
CHEMICAL			
Acetone, Alcohol (Methyl or Ethyl 50%), Benzene, Ethylen dichloride, Soap Aqua Solution, Toluene, Trichlorethylene,			NO CHANGE

* Values provided cannot be guaranteed in your application due to circumstances beyond our control.

