

**LUXACRYL®/2h** is ttv's precision cast acrylic (PMMA) for applications with requirements of excellent optical quality, but with a special hard coating on both surfaces (pencil hardness > 6H) to enhance scratch resistance.

**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 3H) does not meet the requirements; mainly as windows for any type electronic display.  
(For this application available with additional non glare surface: **ANTIFLEX®-AR3/2h** ) .

**Sheet Size:** Standard 550 x 400 mm; thicknesses from 0.5 mm through 5.0 mm (for off-the-shelf thicknesses: see stock list), thickness tolerance  $\pm 0.1$  mm (up to thickness 3.0 mm). ttv also supplies cut to size or machined to customers' drawings (including silk screen printing and adhesive).

**Special Production:** non-stock thicknesses and tints.

TECHNICAL DATA	TEST METHOD	UNIT	VALUE*
<b>PHYSICAL</b>			
Density	ASTM D-792	g/cm <sup>3</sup>	1.19
Pencil Hardness	ASTM D-3363		approx. 6-8H
<b>OPTICAL</b>			
Transmission	ASTM D-1003	%	approx. 91
Refractive Index	ASTM D-542		1.49
<b>THERMAL</b>			
Max. Continuous Temperature		°C	80
Heat Distortion Temperature	ASTM D-648	°C	110
Coeff. of Thermal Expansion	ASTM D-696	1/°C	$7 \times 10^{-5}$
Coeff. of Thermal Conductivity	DIN 52612	W/mK	0.17
<b>MECHANICAL</b>			
Rupture Strength (tensile)	ASTM D-638	kg/cm <sup>2</sup>	600
Rupture Strength (flexural)	ASTM D-790	kg/cm <sup>2</sup>	800
Elongation	ASTM D-638	%	5
Surface Resistance	ASTM D-257	ohms	$> 10^{16}$
<b>CHEMICAL RESISTANCE</b>			
acetone, alcohol (methyl or ethyl 50%), benzene, ethylene dichloride, soap aqua solution, toluene, trichlorethylene			NO CHANGE

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



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