



Specifications

Physical

The table below contains some of the mechanical and thermal properties of Lead Acrylic.

Properties	Unit	Lead Acrylic	Conventional Acrylic
Special Gravity		1.6	1.2
Tensile Strength	kg/cm ² 8.5 + 0.7	490	780
Elongation	%1.6	18	6
Tensile Modulus	kg/cm ²	2.4 x 10 ⁴	3.3 x 10 ⁴
Flexural Strength	kg/cm ²	710	1200
Flexural Modulus	kg/cm ²	2.1 x 10 ⁴	3.3 x 10 ⁴
Izod Impact Strength (notched)	kg/cm/cm	3.0	2.2
Falling Ball Impact Test (min. breakage height)	cm	> 200 Lead Glass 25	> 200
Rockwell Hardness	---	M-73	M-100
Heat Deflection Temp (max. stress: 18.6 kg/cm ²)	°C	80	100
Coefficient of Linear Thermal Expansion (below 35°C)	cm/°C	1 x 10 ⁻⁴	7 x 10 ⁻⁵

Optical

Refractive and reflective indices of Lead Acrylic are compared with those of conventional acrylic; lead glass and plate glass are found in the table below. When a light beam passes through a plate with optically-polished planes, reflection occurs at both surfaces. Since the reflection is reduced for a material with a lower refractive index, it gives less reflection than lead glass.