Injection Molding

Acrylic (PMMA)

Key Features

Transparency • Stiffness • UV resistance • High viscosity • Flame retardancy

Applications

End-use parts • Automotive • Electronics • Medicine • Consumer goods

Product Description

PMMA is a high-transparency acrylic resin known for its excellent optical clarity, weather resistance, and high surface hardness. Ideal for injection molding, this material is widely used in automotive light covers, consumer electronics displays, construction windows and skylights, medical device housings, and illuminated signage. Its combination of good mechanical strength and ease of processing makes it a versatile choice for various industries.

Properties*

Tensile strength	70 MPa
Elongation at break	12%
Izod impact strength (23°C, notched)	2 kJ/m^2
Flexural strength	103 MPa
Flexural modulus	2,800 MPa
Heat deflection temperature (1.80 MPa)	95°C
Vicat softening temperature	115°C
Coefficient of linear thermal expansion	6 X 10-5
Mold shrinkage	0.2 ~ 0.6%
Density	1.19 g/cm^3
Flame retardancy (1.5 mm)	UL 94-HB

*Based on material ACRYREX® CM-205, unannealed state

Reference

For more detailed source information, please consult the original document linked here. We encourage users to verify the data's relevance and suitability for their specific needs.