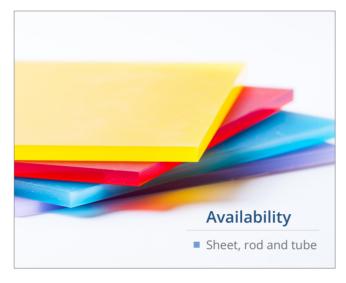


Acrylic (PMMA)

NGINFFRING PLASTIC

Page: 1 of 1



Key Features

- UV-resistant, low-water absorption
- Good insulation properties
- Good stiffness and abrasion resistance
- Clear/colourable clarity is excellent

Product Overview

Acrylic (also known as **PMMA** or Polymethyl-Methacrylate) is an amorphous thermoplastic.

The material offers a high strength-to-weight ratio, is optically transparent and unaffected by water. Often used as an alternative to glass, it should not be considered for structural applications due to the thermoplastic's poor impact resistance. Trade names for Acrylics include Acrylite ®, Lucite ® and Plexiglass ®.

Whilst acrylics are not recommended for use with chlorinated or aromatic hydrocarbons, ester or ketones, the material is unaffected by aqueous solutions of most detergents, acids, alkalis and laboratory chemicals.

Applications

- Liquid chemical pumps, water tank liners
- Master cylinders
- Dashboard lighting
- Hard contact lenses, helmet visors

Mechanical Properties

Tensile Strength	(psi)	8,000 - 11,000	
Tensile Modulus	(psi)	350,000 - 500,000	
Tensile Elongation at break	(%)	2	
Flexural Strengh	(psi)	12,000 - 17,000	
Flexural Modulus	(psi)	350,000 - 500,000	
Compressive Strength	(psi)	11,000 - 19,000	
Compressive Modulus	(psi)		
Hardness	Rockwell	M80 - M100	
IZOD Notched Impact	(ft-lb/in)	0.3	

Thermal Properties

Coefficient of Thermal Expansion	(x 10 in./in./°F)	5 - 9
Flammability Rating	UL94	
Heat DeflectionTemperature @264	(psi)	150 - 210 / 65 - 100
Melting Temp	(°F / °C)	265 - 285 / 130 - 140
Max Operating Temp	(°F / °C)	150 - 200 / 65 - 93



Thames Stockholders

Unit 5W. Woodall Road, Redburn Industrial Estate Ponders End, Enfield, Middlesex EN3 4LQ

Tel: +44 (0)20 8805 3282









sales@thamesstock.com



www.thamesstock.com