



# UMA 90

## Alternative Designations

Urethane Methacrylate

## Key Features

High stiffness • Strength • Smooth surface finish

## Description

UMA 90 is a high-performance polyurethane material that offers an excellent balance of properties for a wide range of applications. It has high strength and stiffness, good abrasion resistance, and good dimensional stability. It is also resistant to a variety of chemicals, including oils, greases, and fuels. It is typically used in applications where strength, stiffness, and abrasion resistance are required, such as in gears, jigs, and fixtures. It produces smooth surface finish with excellent mechanical properties.

## Mechanical Properties

Tensile modulus	1400 MPa
Tensile strength	30 MPa
Elongation at break	30%
Flexural strength	50 MPa
Flexural modulus	1.2 GPa
Hardness (Shore D)	86

## Thermal Properties

Heat deflection temperature (1.80 MPa)	35°C
Heat deflection temperature (0.45 MPa)	45°C

## Physical Properties

Density	1.2 g/cm <sup>3</sup>
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## Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit [Materialdatacenter.com](https://Materialdatacenter.com) for further information on this material.