

# ABS M30

## Alternative Designations

Acrylonitrile butadiene styrene M30

## Key Features

High resistance • Toughness, suitable for 3d printing, durable, and stronger layer bonding

## Description

This is a high-impact resistant and tough thermoplastic: it has a softening temperature of about 99°C. It is highly resistant to aqueous, phosphorus, and hydrochloric acids. However, it can be damaged by sunlight. ABS M30 is extensively used to manufacture 3D printed parts from FDM 3D printers. It is useful in the production of functional prototypes, conceptual modeling, and end-use parts.

## Mechanical Properties

Tensile modulus	2180 – 2230 MPa
Tensile strength	28 – 32 MPa
Elongation at break	2 – 7%
Flexural strength	48 – 60 MPa
Flexural modulus	1.76 – 2.06 GPa

## Thermal Properties

Heat deflection temperature (1.80 MPa)	82°C
Heat deflection temperature (0.45 MPa)	96°C
Softening temperature	99°C

## Physical Properties

Density	1.04 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.