Data Sheet

# 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

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|---|---|
| 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

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|---|---|
| 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$^3$ |

## Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit Materialdatacenter.com for further information on this material.