

Acrylonitrile Butadiene Styrene (ABS) 3D Printer Filament

General:

ABS is a thermoplastic commonly used with Fused deposition modelling (FDM). ABS is lightweight, has great impact resistance and durability, making it suitable for producing functional parts. However, due to greater warping and shrinkage, ABS is more difficult to print with than PLA and often needs a heated bed or chamber.

Benefits:

- High impact resistance
- Low cost
- Good surface finish
- Good heat resistance

Limitations

- More difficult to print with than PLA or PETG
- Low UV resistance
- Less sustainable than PLA

ASMPT Applications:

- 3D printed tooling and jigs

Colours:

- Colours can be specified in part drawings. For example, **DSM 3.3.4_Black**

These values are representative and vary considerably between suppliers and print settings. For critical applications, refer to datasheet.

Mechanical Properties (FDM Test Specimen)					
	HARDNESS SHORE D	TENSILE STRENGTH	YOUNGS MODULUS:	IMPACT STRENGTH	DENSITY
ABS	76	30-45 MPa (XY) 20 MPa (Z)	2 GPa	15 kJ/m ²	1100 kg/m ³

Alternatives:

Alternative polymers are allowed only with the express written permission of ASMPT. Please email details of your request to engineering_enquiries@asmpt.com

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