

DSM 3.1.6

Nylon 6_Cast

General:

Polyamide (PA) is one of the most widely used engineering semi-crystalline thermoplastics, commonly known as **Nylon**.

PA6 has higher impact strength, slightly better low temperature properties and improved surface appearance compared to PA66. It also has a better resistance to solvents, grease and detergents but a poorer resistance to dilute mineral acids.

Benefits:

- Greater fatigue and abrasion resistance
- They are tough, rigid and have chemical resistance to hydrocarbons.
- Improved dimensional stability.
- Easily machined.
- Easily welded.
- Good damping
- Electrically insulating
- Cheaper than PA66

Limitations:

- Absorbs moisture (hygroscopic) which could affect dimensional stability.
- Low flame-retardant standards (UL94: HB).
- Poor chemical resistance to strong acids

ASM (DEK) Applications:

- Paste plunger; guides

Profiles:

- Plate: 8 – 40 mm thick
- Rod: 50 – 95 mm Diameter
- Tube

These values are representative. For critical applications, refer to data-sheet.

MECHANICAL PROPERTIES					
MATERIAL DETAILS	HARDNESS Shore A	TENSILE STRENGTH:	YOUNGS MODULUS:	POISSONS RATIO:	DENSITY:
PA 6	---	83 MPa	2.8 GPa	0.36	1150 Kg/m³

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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