

DSM 3.1.2

Nylon 66 + MoS2 (Cast)

General:

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

Nylon 66 (**PA66**) with the addition of Molybdenum Disulfide (MoS2) enhances virtually all the mechanical properties of the base Nylon.

MoS2 being a well-known dry lubricant renders the modified material with improved wear resistance & lower friction. MoS2 also encourages crystallinity to provide a stronger, stiffer material with the benefits of higher distortion temperatures and greater dimensional stability.

Benefits:

- Greater fatigue and abrasion resistance
- They are tough, rigid and have chemical resistance to hydrocarbons.
- Improved dimensional stability.
- Easily machined.
- Easily welded.

Limitations:

- Absorbs moisture (hygroscopic) which could affect dimensional stability.
- Absorbs more moisture at saturation than PA 6
- Low flame-retardant standards (UL94: HB).
- Poor chemical resistance to strong acids

ASM (DEK) Applications:

- Bushes & bearings. High temperature and low friction applications.

Profiles:

- Plate: 8 – 50 mm thick
- Rod: 10 – 50 mm Diameter
- Tube

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

MECHANICAL PROPERTIES					
	HARDNESS Shore A	TENSILE STRENGTH:	YOUNGS MODULUS:	POISSONS RATIO:	DENSITY:
PA 66 + MoS2	---	95 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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DCR	7135	44832							

