



Technical Data Sheet

MX-Nylon: Grade 6000

Product Information

A low viscosity grade with good thermal stability and high modulus/strength suitable for compound for injection molding application.

Property	Method	Units	Typical Value
Melting point (T_m)	DSC	°C/°F	237 / 459
Glass transition temperature (T_g)	DSC	°C/°F	85 / 185
Specific gravity	ASTM D792	--	1.22
Relative Viscosity	ISO 307	--	2.10
Water absorption equilibrium in water @20°C	ASTM D570	%	5.8
Thermal expansion	D696	cm/cm °C	5×10^{-5}
Tensile strength	D638	MPa kgf/cm ²	99 1010
Tensile elongation	D638	%	2.3
Tensile modulus	D638	GPa kgf/cm ²	4.7 48×10^3
Izod impact (notched)	D256	J/m kg·cm/cm	20 2
Rockwell hardness	D785	M Scale	108

* Physical properties of an injection molded specimen.

Processing, Handling and Storage

Processing temperatures between 250°C and 290°C (482°F and 554°F) are suggested for initial evaluations. Maximum processing temperature should not exceed 300°C (572°F). Packages stored in cold rooms should be allowed to equilibrate to normal temperature before opening to minimize condensation. Pellets that have absorbed water from exposure to air may be dried using suitable drying conditions either at 100°C for 12 hours in conventional drier or vacuum venting during compounding process.



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Safety and Hygiene

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FDA has approved the use of MX Nylon for indirect and direct food contact with specific food applications and conditions of use.

- Direct contact 21 CFR Part 177.1500 (b) 10.1
- Indirect contact 21 CFR Part 177.1390 (c) (1) (i) (e)
21 CFR Part 177.1500 (b) 10.3
- Modifier of PET 21 CFR Part 177.1630 (e) (4) (v)
- Modifier of PET FCN# 870*

*21 CFR 177.1500 (b), item 10.2, when tested by the methods given in 21 CFR 177.1500 (c)

MX Nylon is in compliance with EC-Directives for food packaging materials.

The data listed here fall within the normal range of product properties but they should not be used to establish specification limits nor used alone as the basis of design. These data do not imply any guarantee of certain properties, or the suitability of the product for a suitable purpose. MGC Advanced Polymers, Inc. assumes no obligation or liability for any advice furnished by it or for results obtained with respect of this information. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed. All such advice is given and accepted at the buyer's risk.

CAUTION: Do not use in medical applications involving permanent implantation in the human body.