



**Engineering
Plastics**

QUANDA
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Typical Properties Data Sheet

The Supplier of Engineering Plastics
Rods, Sheets, Tubes, Profiles and Machining Parts

Recalon® MC Nylon + molybdenum disulfide Properties Data Sheet

① Raw material description

Standard Grade:	Casting grade	Appearance color:	---
Application:	Processing materials, sheet, tube. Widely used in making gears, bearing, star wheel and cover.		
Remarks:	Characters: Superior mechanical strength, rigidity, hardness, tenacity, ageing-resistance, mechanical vibration attenuation, good lubricity, excellent abrasion resistance, superior machining property, used in precision effective control, no creep, high abrasive resistance, good dimensional stability.		

② Raw material technical datasheet

Property item	Test conditions	Testing method	Testing data	Unit
I. Physical property				
Density	23°C	ASTM D792	1.15	g/cm ³
Shrinkage	---	ASTM D955	1.0~1.4	%
Balanced water absorption	24h dipping (23°C)	ASTM D570	0.72	%
Flammability class	---	UL94	HB	Class

II. Mechanical property

Pendulum bob notch impact strength	---	ASTM D256	3.5	KJ/m ²
Flexural tensile stress	---	ASTM D638	81	MPa
Tensile strain at break	---	ASTM D638	35	%
Tensile modulus of elasticity	---	ASTM D638	3200	MPa
Compressive stress	—1%/2% The normal strain	ASTM D790	25/49	MPa
Hardness-Rockwell	---	ASTM D785	85	M (Scale)

III. Thermal property

Max. working temperature(short time)	---	UL746B	170	°C
Max. working temperature(long time)	---	UL746B	105	°C
Melting temperature	---	ASTM D2133	220	°C
Coefficient of linear thermal expansion	23-100° C average value	ASTM D696	80×10 ⁻⁶	m/(m.k)
	23-150° Coverage value	ASTM D696	90×10 ⁻⁶	m/(m.k)

IV. Electrical property

Dielectric constant	—100Hz/1MHz	ASTM D150	3.6/3.2	---
Dielectric strength	---	ASTM D149	25	kV/mm
Volume resistivity	---	ASTM D257	10 ¹⁴	(Ω) * cm
Surface resistivity	---	ASTM D257	≥10 ¹³	(Ω)

NOTE: 1 g/cm³ = 1,000 kg/m³, 1 Mpa = 1 N/mm², 1kV/mm = 1 MV/m

Statement:

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Quanda will not provide any legally binding guarantee of certain properties, or any suitability.