



**Engineering
Plastics**

QUANDA

Shenzhen Quanda Plastic Co., Ltd.

Web: www.quandaplastic.com

Email: info@quandaplastic.com

Tel: 0086-755-28113160



Typical Properties Data Sheet

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

Recalon® PA6G(MC Nylon) Properties Data Sheet

① Raw material description

Standard Grade:	Casting grade	Appearance:	---
Applications:	Processing material, sheet, strip, tube, used in machinery, instrument, automobile components, electronics, railway, household appliances, communication, frame, pipeline and other precision engineering.		
Remarks:	Character: excellent combination properties, high strength, rigidity and hardness, creep resistance, wear resistance, heat-proof aging, good mechanical properties.		

② Raw material technical datasheet

Property item	Test conditions	Testing method	Testing data	Unit
I. Physical property				
Density	23°C	ISO 1183	1.14~1.16	g/cm ³
Shrinkage	---	---	1.5~1.8	%
Water absorption	Impregnation (23°C)	ISO 62	>0.9	%
Flammability class	---	---	self-extinguish	---
II. Chemical property				
Impact strength	23°C	ISO 179-1	15	kJ/m ²
Tensile strength	---	ISO 527-1.2	75~96	MPa
Tensile strength at break	---	ISO 527-2	---	---
Elongation at break	---	ISO 527-2	20	%
Flexural Strength	---	ISO 178	90	MPa
Flexural Modulus of elasticity	---	ISO 178	3100	MPa
Hardness—Rockwell	---	ISO 2039-2	110	R (Scale)
Hardness—Shore D	---	DIN 53505	84	D
Impact Strength (notched)	---	ISO 180	11	kJ/m ²
Friction Coefficient	---	DIN 53375	0.36	---
III. Thermal property				
Heat deflection temperature HDT/A	1.82MPa	ISO 75-2	93	°C
Max. working temperature(long time)	---	---	120	°C
Melting point	---	ISO 3416	220	°C
Brittle temperature	---	---	-9	°C
Thermal conductivity	23°C	DIN 11359	0.28	W/(m*K)
Coefficient of linear thermal expansion	---	ISO 11359	≤7.56	×10 ⁻⁵ K ⁻¹
IV. Electrical property				
Dielectric Constant	1 MHz	IEC 60250	3.7	10 ⁶ Hz
Dielectric loss angle tangent	1 MHz	IEC 60250	0.02	10 ⁶ Hz

Dielectric strength		IEC 1183	10	kV/mm
Volume resistivity	---	IEC 60093	$10^{12} \sim 10^{15}$	(Ω) * cm
Surface resistivity	---	IEC 60093	$\geq 10^{13}$	(Ω)

Note: $1 \text{ g/cm}^3 = 1,000 \text{ kg/m}^3$, $1 \text{ Mpa} = 1 \text{ N/mm}^2$, $1 \text{ kV/mm} = 1 \text{ MV/m}$

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.