

# UBE Nylon 1013B

Polyamide 6



## General

Generic identification and marking	PA6
Market example	General
Application example	General
Processing example	Injection molding
Elemental Technology	Neat resin
Production area	Japan, Thailand, Spain
Development product	Not applicable

Mechanical property	Unit	Test standard	Typical value
Tensile strength	MPa	ISO527-1,2	80
Tensile strain at break	%	ISO527-1,2	30
Tensile modulus	GPa	ISO527-1,2	2.9
Flexural strength	MPa	ISO178	110
Flexural modulus	GPa	ISO178	2.7
Charpy notched impact strength	kJ/m <sup>2</sup>	ISO179-1/1eA	6
Rockwell hardness (R scale)	-	ISO2039	120
Rockwell hardness (M scale)	-	ISO2039	80
Rockwell hardness (R scale) after moisture absorption	-	ISO2039	85
Rockwell hardness (M scale) after moisture absorption	-	ISO2039	55

Thermal property	Unit	Test standard	Typical value
Melting temperature	°C	ISO11357	215-225
Temperature of deflection under load at 0.45MPa	°C	ISO75-1,2	155
Temperature of deflection under load at 1.8MPa	°C	ISO75-1,2	60
Coefficient of linear thermal expansion	× 10 <sup>-5</sup> /K	ISO11359-2	8.0

Electrical property	Unit	Test standard	Typical value
Dielectric strength	kV/mm	IEC60243-1	20
Arc resistance	sec	ASTMD495	119
CTI	-	UL746A	0
Dielectric constant	-	IEC60250	3.5
Volume resistivity	Ω · cm	IEC60093	10 <sup>15</sup>
Volume resistivity after moisture absorption	Ω · cm	IEC60093	10 <sup>12</sup>
Dielectric constant (1 MHz)	-	ASTMD150	3.5
Dissipation factor (1 MHz)	-	ASTMD150	20

Molding property	Unit	Test standard	Typical value
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Other property	Unit	Test standard	Typical value
Density	g/cm <sup>3</sup>	ISO1183	1.14
Water absorption at equilibrium	%	UBE Method	3.0
Flammability rating	-	UL94	V-2

## Remarks

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\* The data described herein are averaged values obtained by specified measurement: they are not guaranteed figures.

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