

# UBE Nylon 3030LUX

Polyamide 12



## General

Generic identification and marking	PA12
Market example	Automotive
Application example	Fuel Line
Processing example	Tube molding, Extrusion Coating
Elemental Technology	Heat resistant, Coating
Production area	Japan, Spain
Development product	Not applicable

## Mechanical property

	Unit	Test standard	Typical value
Tensile strength	MPa	ISO527-1,2	47
Tensile strain at break	%	ISO527-1,2	>150
Tensile modulus	MPa	ISO527-1,2	1600
Flexural strength	MPa	ISO178	60
Flexural modulus	MPa	ISO178	1500
Charpy notched impact strength	kJ/m <sup>2</sup>	ISO179-1/1eA	13
Rockwell hardness (R scale)	-	ISO2039	105
Shore D hardness	-	ISO868	78

## Thermal property

	Unit	Test standard	Typical value
Melting temperature	°C	ISO11357	175-181
Temperature of deflection under load at 0.45MPa	°C	ISO75-1,2	112
Temperature of deflection under load at 1.8MPa	°C	ISO75-1,2	49
Coefficient of linear thermal expansion	x10 <sup>-5</sup> /K	ISO11359-2	12.0

## Electrical property

	Unit	Test standard	Typical value
Dielectric strength	kV/mm	IEC60243-1	30
Arc resistance	sec	ASTMD495	180
Volume resistivity	Ω · cm	IEC60093	10 <sup>15</sup>
Dielectric constant (1 MHz)	-	ASTMD150	3.1

## Molding property

	Unit	Test standard	Typical value
Mold shrinkage(MD)	%	ISO 294-4 D-2	0.6
Mold shrinkage(TD)	%	ISO 294-4 D-2	1.5

## Other property

	Unit	Test standard	Typical value
Density	g/cm <sup>3</sup>	ISO1183	1.02
Water absorption at equilibrium	%	UBE Method	0.6

## Remarks

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