

UBE Nylon 3024LU

Polyamide 12



General	
Generic identification and marking	PA12
Market example	Electrical & Electronics, Industrial
Application example	Electrical & Electronics, Consumer Electronics
Processing example	Extrusion Coating
Elemental Technology	Heat resistant, Weather resistant
Production area	Japan
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	1700
Flexural strength	MPa	ISO178	60
Flexural modulus	MPa	ISO178	1600
Charpy notched impact strength	kJ/m ²	ISO179-1/1eA	6
Rockwell hardness (R scale)	-	ISO2039	105
Shore D hardness	-	ISO868	77

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	115
Temperature of deflection under load at 1.8MPa	°C	ISO75-1,2	47
Coefficient of linear thermal expansion	x10 ⁻⁵ /K	ISO11359-2	13.0

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 ¹⁵

Molding property	Unit	Test standard	Typical value
Mold shrinkage(MD)	%	ISO 294-4 D-2	0.9
Mold shrinkage(TD)	%	ISO 294-4 D-2	1.2

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

Remarks

- * The contents of here written materials were prepared based on materials, information and data available at the present moment. They may be revised because of new knowledge, information and data without notification.
- * The data described herein are averaged values obtained by specified measurement: they are not guaranteed figures.
- * UBE does not warrant or guarantee the quality or safety of your finished products, including but not limited to implied warranties of merchantability, fitness for a particular purpose and noninfringement of third party rights or arising from a course of dealing, usage or trade practice even if UBE's products and data herein or any other information proposed by UBE are used to manufacture the finished products. Determination of suitability, merchantability or fitness for a particular purpose of your finished products shall be on your responsibility.
- * UBE has no liability or legal responsibility for any issues or problems in relation to standards, regulations, laws, intellectual property rights – especially patent rights, etc. derived from any applications of UBE products for your finished products. So it should be fully researched and studied by yourself.
- * UBE highly recommends to read the Safety Data Sheet “SDS” before using UBE products to ensure your safety.
- * Do not use UBE products in medical application for the parts involving implanting in human body. Please consult in advance for a medical application or parts in contact with food stuff.
- * “UBE NYLON”, “UBESTA” and “UBESTA XPA” are registered trademark in Japan and other countries.
- * Copyright of all information in document belongs to UBE Corporation. Reproduction without UBE's permission is strictly forbidden.