



UNITIKA PLASTICS DIVISION

Japanese
Chinese

Printing Tips

Nylon Resin
U-polymer
TERRAMAC
UNILATE
elitel
Powder Paint Resins

U-polymer > AX Series Resins
Top Page

Schematic Grade Diagram
Position among Engineering Plastics
Available Grades
U-100 (neat polymer)
P Series
U Series
AX Series

AX Series Resins
Technical Data
Composite Grades

Precautions in molding

Applications

Contact Us

U-polymer

AX series (Opaque chemical-resistant grade)

AX series resins are opaque polymer alloys with a high deflection temperature under load without reinforcement and a chemical resistance as high as those of crystalline resins. They are excellent in moldability and provide molded products fewer in the number of sink marks, warps, and run-offs.

Characteristics

- Nonreinforced heat resistance:** Deflection temperature under load without reinforcement: 1.8 MPa at 150 °C
- Chemical resistance:** As high as those of polyamide resins, except alkali resistance
- Adhesiveness:** Chemical resistance and adhesiveness as high as those of crystalline resins
- Lubrication:** As high as those of polyamide resins
- Molding accuracy:** Fewer in the number of sink marks and warps, and lower (less than 1/3) in water absorption than polyamide resins

Properties

Print Table on A4 Paper

		AX-1500			
	Item	ASTM	Unit: SI (conventional)	When absolutely dry	When equilibrium moisture absorption
Mechanical Properties	Density	D-792	-	1.17	-
	Water absorption (1/8", 24hrs)	D-570	%	0.75	-
	Light transmittance (Thickness: 3mm)	D-1003	%	-	-
	Tensile strength	D-638	MPa {kg/cm ² }	72 {730}	53 {540}
	Elongation at break	D-638	%	50	70
	Bending strength	D-790	MPa {kg/cm ² }	103 {1,050}	76 {770}
	Bending modulus	D-790	GPa {kg/cm ² }	2.6 {26,000}	1.2 {12,000}
	Compressive strength (Yield)	D-695	MPa {kg/cm ² }	-	-
	Izod impact strength (1/8", with notch)	D-256	J/m {kg-Ecm/cm}	78 {8}	196 {20}
Thermal properties	Rockwell hardness	D-785	R	105	-
	Deflection temperature under load 1.8MPa {18.6kg/cm ² }	D-648	°C	150	-
	Linear expansion coefficient	D-696	10 ⁻⁵ /K {10 ⁻⁵ cm/cm/°C}	7.7	-
Electrical Properties	Dielectric breakdown strength	D-149	MV/m {kv/mm}	-	25
	Specific volume resistivity	D-257	Ωm {Ωcm}	-	1x10 ¹² {1x10 ¹⁴ }
	Dielectric constant (10 ⁶ Hz)	D-150	PF/m	-	32 {3.6}
	Dielectric dissipation factor(10 ⁶ Hz)	D-150	-	-	0.04
	Ark resistance	D-495	s	-	84
	Tracking resistance	IEC	V	-	600<
Other properties	Molding shrinkage (Thickness: 3mm)	-	%	1.0	-
	Flow direction, orthogonal direction				

To Page Top

http://www.unitika.co.jp/plastics/E/upolymer/07.html

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