

Product Data Sheet

Product : Quadrant Polypenco Korea PP - Polypropylene

Categories : Polymer; Thermoplastic; Polypropylene (PP) ; Polypropylene

Properties	Units	Test Methods	PP
Physical Properties			
Specific Gravity	g/cc	ASTM D 792	0.90
Water Absorption, Immersion, 24hr	%	ASTM D 570(2)	≤ 0.01
Water Absorption at Saturation, Immersion	%	ASTM D 570(2)	≤ 0.01
Mechanical Properties			
Tensile Strength	MPa	ASTM D 638	35.1
Tensile Modulus	GPa	ASTM D 638	1.26
Elongation at Break	%	ASTM D 638	76
Flexural Yield Strength	MPa	ASTM D 790	44.3
Flexural Modulus	GPa	ASTM D 790	1.68
Compressive Strength	MPa	10% Def.; ASTM D 695	33.1
Compressive Modulus	GPa	ASTM D 695	1.21
Izod Impact, Notched	J/m	ASTM D 256	51
Hardness, Shore D	D	ASTM D 2240	72
Rockwell Hardness, R	R scale	ASTM D 785	100
Electrical Properties			
Volume Resistivity	Ω·cm	-	≥ 1X10 ¹⁵
Surface Resistivity per Square	Ω	ASTM D 257	≥ 1X10 ¹⁵
Thermal Properties			
Melting point	°C	ASTM D 3418	152
Maximum Service Temperature, Air	°C	Long Term	82.2
Deflection Temperature at 1.8 Mpa (264psi)	°C	ASTM D 648	100
Flammability, UL94	-	-	HB
Compliance Property			Comments
FDA			Yes
RoHS			Yes

Descriptive Properties

Color		Natural
Machinability	1-10, 1=Easier to Machine	3

Chemical Resistance Properties

Acid, Strong (pH1-3)	Acceptable
Acids, Weak	Acceptable
Alcohls	Acceptable
Alkalies, Weak	Acceptable
Alkalies, Strong (pH 11-14)	Acceptable
Chlorinated Solvent	Unacceptable
Conductive / Static Dissipative	No
Continuous Sunlight	Limited
Hot Water / Steam	Limited
Hydrocarbons – Aliphatic	Unacceptable
Hydrocarbons – Aromatic	Unacceptable
Inorganic Salt Solution	Acceptable
Ketones, Esters	Unacceptable

Miscellaneous Properties

Targeted Usage	Structural Uses
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