ENTEC

CHIMEI KIBISAN® SAN PRODUCT GUIDE

CHIMEI

a step up

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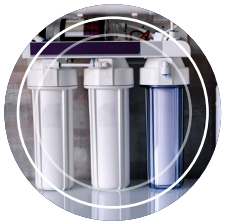
CHIMEI KIBISAN® SAN is a transparent copolymer of styrene and acrylonitrile. The styrene portion provides for clarity, stiffness and good processability while the acrylonitrile portion provides hardness, stiffness, heat resistance and excellent chemical resistance and dishwasher resistance. KIBISAN® is available with various melt flow rates for use in injection molding and extrusion, which are the most common processing methods used to convert KIBISAN® into the different application parts.

Common markets for KIBISAN® include automotive, housewares, appliances, healthcare, cosmetics, and sanitary products as well as other industrial markets. Specific applications for KIBISAN® include:

WATER FILTER HOUSINGS



KITCHEN HOUSEWARES

COSMETIC CONTAINERS

TOOTHBRUSH HANDLES

BATHROOM HOUSEWARES

KITCHEN APPLIANCES

MEDICAL DIAGNOSTICS

INSTRUMENT PANEL LENSES

CARRIER RESINS FOR CONCENTRATES

Compared to many other transparent polymers, KIBISAN® offers better chemical resistance, better processability and higher stiffness while maintaining high clarity. Because of its excellent dishwasher resistance, KIBISAN® makes an excellent material choice for housewares that will routinely be cleaned in the dishwasher.

PROPERTY	TEST METHOD	UNITS	PN-106	PN-107	PN-117C	PN-127
Density	ISO 1183	g/cm³	1.06	1.06	1.06	1.06
Melt Flow Rate (200°C/5kg)	ASTM D1238	g/10 min.	3.0	5.0	5.0	1.5
Melt Volume Rate (220°C/10kg)	ISO 1133	cm³/10 min.	32	58	58	17
Mold Shrinkage	ISO 294-4	%	0.20 to 0.70	0.20 to 0.70	0.20 to 0.70	0.20 to 0.70
Tensile Strength at Yield	ISO 527-2/50	MPa	65	65	67	74
Tensile Strength at Break	ISO 527-2/50	MPa	65	65	67	74
Tensile Elongation at Break	ISO 527-2/50	%	4.0	4.0	6.0	7.0
Flexural Modulus	ISO 178	MPa	2600	2600	2700	3300
Flexural Strength	ISO 178	MPa	89	89	89	105
Notched Charpy Impact	ISO 179	kJ/m²	2.0	2.0	2.0	2.0
Notched Izod Impact	ISO 180/1A	kJ/m²	2.0	2.0	2.0	3.0
HDT at 1.8 Mpa, Unannealed	ISO 75-2/A	°C	88	88	89	90
HDT at 1.8 Mpa, Annealed	ISO 75-2/A	°C	99	99	100	101
Vicat Softening Temperature	ISO 306/A50	°C	104	104	104	105
Vicat Softening Temperature	ISO 306/B50	°C	101	101	102	104

PROCESSING CONDITIONS	UNITS	PN-106	PN-107	PN-117C	PN-127
Drying Temperature	°C	75 to 80	75 to 80	75 to 80	75 to 80
Drying Time	Hours	3 to 4	3 to 4	3 to 4	3 to 4
Rear Temperature	°C	160 to 180	160 to 180	170 to 200	190 to 210
Middle Temperature	°C	180 to 200	180 to 200	180 to 210	200 to 220
Front Temperature	°C	180 to 210	180 to 210	180 to 210	200 to 220
Mold Temperature	°C	40 to 60	40 to 60	40 to 60	40 to 60