

CHIMEI KIBISAN® SAN PRODUCT GUIDE

CHIMEI

a step up





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.



## CHIMEI KIBISAN® SAN PRODUCT PROPERTY GUIDE

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			GENERAL PURPOSE					FOOD CONTACT				
PROPERTY	TEST METHOD	UNITS	PN-106	PN-107	PN-117C	PN-127	PN-127H	PN-137H	PN-106 L150 FG	PN-107 L125 FG	PN-117C FG	PN-127 L150 FG
Density	ISO 1183	g/cm³	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Melt Volume Rate (220°C/10kg)	ISO 1133	cm³/10 min.	32	58	58	17	18	12	32	58	58	17
Mold Shrinkage	ISO 294-4	%	0.20 - 0.70	0.20 - 0.70	0.20 - 0.70	0.20 - 0.70	0.20 - 0.07	0.20 - 0.07	0.20 - 0.07	0.20 - 0.07	0.20 - 0.07	0.20 -0.07
Tensile Strength at Yield	ISO 527-2/50	MPa	65	65	67	74	79	83	65	65	67	74
Tensile Strength at Break	ISO 527-2/50	MPa	65	65	67	74	79	83	65	65	67	74
Tensile Elongation at Break	ISO 527-2/50	%	4.0	4.0	6.0	7.0	7.0	7.0	4.0	4.0	6.0	7.0
Flexural Modulus	ISO 178	MPa	2600	2600	2700	3300	3600	4000	2600	2600	2700	3300
Flexural Strength	ISO 178	MPa	89	89	89	105	109	123	89	89	89	105
Notched Charpy Impact	ISO 179	kJ/m²	2.0	2.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0	2.0
Notched Izod Impact	ISO 180/1A	kJ/m²	2.0	2.0	2.0	3.0	3.0	3.0	2.0	2.0	2.0	3.0
HDT at 1.8 Mpa, Unannealed	ISO 75-2/A	°C	88	88	89	90	91	91	88	88	89	90
HDT at 1.8 Mpa, Annealed	ISO 75-2/A	°C	99	99	100	101	102	102	99	99	100	101
Vicat Softening Temperature	ISO 306/A50	°C	104	104	104	105	107	108	101	104	104	105
Vicat Softening Temperature	ISO 306/B50	°C	101	101	102	104	104	105	104	101	102	104



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PROCESSING CONDITIONS	UNITS	PN-106	PN-107	PN-117C	PN-127	PN-127H	PN-137H	PN-106 L150 FG	PN-107 L125 FG	PN-117C FG	PN-127 L150 FG
Drying Temperature	°C	75 - 80	75 - 80	75 - 80	75 - 80	75 - 80	75 - 80	75 - 80	75-80	75 - 80	75 - 80
Drying Time	Hours	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4
Rear Temperature	°C	160 - 180	160 - 180	170 - 200	190 - 210	190 - 210	190 - 210	160 - 180	160 - 180	170 - 200	190 - 210
Middle Temperature	°C	180 - 200	180 - 200	180 - 210	200 - 220	200 - 220	200 - 220	180 - 200	180 - 200	180 - 210	200 - 220
Front Temperature	°C	180 - 210	180 - 210	180 - 210	200 - 220	200 - 220	200 - 220	180 - 210	180 - 210	180 - 210	200 - 220
Mold Temperature	°C	40 - 60	40 - 60	40 - 60	40 - 60	40 - 60	40 - 60	40 - 60	40 - 60	40 - 60	40 - 60

