

XENOY™ RESIN 1731HS

REGION ASIA

DESCRIPTION

XENOY™ 1731HS Resin is a polycarbonate / polyester. Hydrostable, Impact & Chemical resistant. Excellent physical property retention in automotive exteriors.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break, 5 mm/min	51	MPa	ISO 527
Tensile Strain, break, 5 mm/min	100	%	ISO 527
Tensile Modulus, 1 mm/min	2100	MPa	ISO 527
Flexural Stress, break, 2 mm/min	78	MPa	ISO 178
Flexural Modulus, 2 mm/min	2000	MPa	ISO 178
IMPACT			
Izod Impact, notched 80*10*4 +23°C	60	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	25	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	19	kJ/m²	ISO 180/1A
THERMAL			
Vicat Softening Temp, Rate B/50	125	°C	ISO 306
Vicat Softening Temp, Rate B/120	127	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	95	°C	ISO 75/Af
CTE, -40°C to 40°C, flow	8.6E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	8.5E-05	1/°C	ISO 11359-2
PHYSICAL			
Density	1.2	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.143	%	ISO 62
Water Absorption, (23°C/saturated)	0.431	%	ISO 62-1
Mold Shrinkage, flow, 3.2 mm	0.6 – 0.8	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.6 – 0.8	%	SABIC method
Melt Volume Rate, MVR at 250°C/5.0 kg	8	cm³/10 min	ISO 1133
Melt Flow Rate, 250°C/5.0 kg	9	g/10 min	ISO 1133
Moisture Absorption, (23°C/50% RH/24 hrs)	0.069	%	ASTM D570
Water Absorption, (23°C/24hrs)	0.241	%	ASTM D570
INJECTION MOLDING			
Drying Temperature	110	°C	
Drying Time	3 – 5	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	255 – 270	°C	
Nozzle Temperature	250 – 265	°C	
Front - Zone 3 Temperature	255 – 270	°C	
Middle - Zone 2 Temperature	250 – 265	°C	



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Rear - Zone 1 Temperature	240 – 260	°C	
Mold Temperature	65 – 75	°C	
Back Pressure	0.3 – 0.6	MPa	
Screw Speed	50 – 80	rpm	
Shot to Cylinder Size	50 – 80	%	
Vent Depth	0.013 – 0.02	mm	