

XYLEX™ RESIN X7519HP

REGION ASIA

DESCRIPTION

Good Chemical Resistance, XYLEX grade with good dishwasher performance, USA/Europe Food Contact

Comment: While molding of thicker parts, cooling speed has an influence of transparency. Thicker parts may form opaque areas in the centre due to slow cooling.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	58	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	66	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	2	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	120	%	ASTM D 638
Tensile Modulus, 5 mm/min	2470	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	98	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2240	MPa	ASTM D 790
Tensile Stress, yield, 50 mm/min	61	MPa	ISO 527
Tensile Stress, break, 50 mm/min	66	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Strain, break, 50 mm/min	134	%	ISO 527
Tensile Modulus, 1 mm/min	2370	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	90	MPa	ISO 178
Flexural Modulus, 2 mm/min	2030	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	700	J/m	ASTM D 256
Izod Impact, notched, -30°C	100	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	74	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	8	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	13	kJ/m²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	130	°C	ASTM D 1525
HDT, 1.82 MPa, 3.2mm, unannealed	113	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.5E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.7E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	7.5E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.5E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	130	°C	ISO 306
Vicat Softening Temp, Rate B/120	132	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	112	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.19	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.7 – 0.8	%	SABIC method

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melt Flow Rate, 300°C/ 1.2 kgf	12.5	g/ 10 min	ASTM D 1238
Density	1.19	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.16	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.14	%	ISO 62
Melt Volume Rate, MVR at 300°C/ 1.2 kg	10	cm ³ /10 min	ISO 1133
INJECTION MOLDING			
Drying Temperature	85 – 100	°C	
Drying Time	2 – 3	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	280 – 300	°C	
Nozzle Temperature	280 – 290	°C	
Front - Zone 3 Temperature	290 – 300	°C	
Middle - Zone 2 Temperature	280 – 290	°C	
Rear - Zone 1 Temperature	275 – 285	°C	
Hopper Temperature	50	°C	
Mold Temperature	65 – 75	°C	
Back Pressure	0.1 – 0.5	MPa	
Screw Speed	20 – 100	rpm	
Shot to Cylinder Size	40 – 80	%	