

XYLEXTM RESIN X8409AC

REGION ASIA

DESCRIPTION

PC + Polyester, Injection (Blow) Molding, or Extrusion Blow molding grade, Chemical Resistance and Transparency

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	57	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	55	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	6	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	92	%	ASTM D 638
Tensile Modulus, 50 mm/min	2370	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	94	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2220	MPa	ASTM D 790
Tensile Stress, yield, 50 mm/min	60	MPa	ISO 527
Tensile Stress, break, 50 mm/min	60	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	5.8	%	ISO 527
Tensile Strain, break, 50 mm/min	117	%	ISO 527
Tensile Modulus, 1 mm/min	2180	MPa	ISO 527
Flexural Stress, break, 2 mm/min	89	MPa	ISO 178
Flexural Modulus, 2 mm/min	2000	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	854	J/m	ASTM D 256
Izod Impact, notched, -30°C	200	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	70	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	10	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -10°C	8	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	8	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	8	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	123	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	116	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	104	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.04E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.04E-04	1/°C	ASTM E 831
Thermal Conductivity	0.23	W/m·°C	ISO 8302
CTE, -40°C to 40°C, flow	1.04E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.04E-04	1/°C	ISO 11359-2
CTE, 23°C to 60°C, flow	6.E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	7.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	121	°C	ISO 306
Vicat Softening Temp, Rate B/120	123	°C	ISO 306

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	102	°C	ISO 75/Ae
PHYSICAL			
Specific Gravity	1.2	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.8	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.5 – 0.8	%	SABIC method
Melt Flow Rate, 265°C/2.16kgf	4	g/ 10 min	ASTM D 1238
Density	1.2	g/cm³	ISO 1183
Water Absorption, (23°C/sat)	0.37	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.13	%	ISO 62
Melt Volume Rate, MVR at 265°C/2.16 kg	3	cm³/ 10 min	ISO 1133
OPTICAL			
Light Transmission, 2.54 mm	88	%	ASTM D 1003
Haze, 2.54 mm	1.5	%	ASTM D 1003
Refractive Index	1.576	-	ASTM D542
EXTRUSION BLOW MOLDING			
Drying Temperature	75 – 90	°C	
Drying Time	4 – 6	hrs	
Drying Time (Cumulative)	24	hrs	
Maximum Moisture Content	0.01 – 0.02	%	
Melt Temperature (Parison)	250 – 270	°C	
Barrel - Zone 1 Temperature	235 – 260	°C	
Barrel - Zone 2 Temperature	235 – 260	°C	
Barrel - Zone 3 Temperature	235 – 260	°C	
Barrel - Zone 4 Temperature	235 – 260	°C	
Adapter - Zone 5 Temperature	235 – 260	°C	
Head - Zone 6 - Top Temperature	240 – 270	°C	
Head - Zone 7 - Middle Temperature	240 – 270	°C	
Head - Zone 7 - Bottom Temperature	240 – 270	°C	
Mold Temperature	30 – 75	°C	