

Xylex * Resin X8409HP

Americas: COMMERCIAL

PC + Polyester, Injection Molding or Injection/Extrusion Blow Molding Grade, Chemical Resistance and Transparency. USA Food Contact. Food contact version of X8409.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 50 mm/min	60	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	2230	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	Value	Unit	Standard
Izod Impact, notched, 23°C	854	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	72	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
THERMAL	Value	Unit	Standard
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, 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/120	123	°C	ISO 306
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	102	°C	ISO 75/Ae
PHYSICAL	Value	Unit	Standard
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
Density	1.2	g/cm ³	ISO 1183
Melt Volume Rate, MVR at 265°C/2.16 kg	3	cm ³ /10 min	ISO 1133
OPTICAL	Value	Unit	Standard
Light Transmission	88	%	ASTM D 1003

Haze	1.5	%	ASTM D 1003
Refractive Index	1.576	-	ISO 489

Source GMD, last updated:04/26/2005

Processing

Parameter	Value	Unit
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

Source GMD, last updated:04/26/2005

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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