GE Plastics

Xylex* Resin X7200

Americas: COMMERCIAL

General purpose, unreinforced PC+polyester alloy. UV- Stabilized.

TYPICAL PROPERTIES [1]	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	560	kgf/cm²	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	570	kgf/cm²	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	135	%	ASTM D 638
Tensile Modulus, 50 mm/min	19100	kgf/cm²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	850	kgf/cm²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	20000	kgf/cm²	ASTM D 790
Hardness, Shore D, 10S reading	75	-	ASTM D 2240
Tensile Stress, yield, 50 mm/min	55	MPa	ISO 527
Tensile Stress, break, 50 mm/min	56	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	5	%	ISO 527
Tensile Strain, break, 50 mm/min	>150	%	ISO 527
Tensile Modulus, 1 mm/min	2000	MPa	ISO 527
Flexural Stress, break, 2 mm/min	75	MPa	ISO 178
Flexural Modulus, 2 mm/min	2000	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	91	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	968	cm-kgf	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	8	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -10°C	5	kJ/m²	ISO 180/1A
THERMAL			
Vicat Softening Temp, Rate B/50	115	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	96	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	90	°C	ASTM D 648

1) Typical values only. Variations within normal tolerances are possible for variose colours.All values are measured at least after 48 hours storage at 230C/50% relative humidity.
All properties, expect the melt volume rate are measured on injection moulded samples.
All samples are prepared according to ISO 294.

2) Only typical data for material selection purpose.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) Own measurement according to UL.

Source, GMD, Last Update:09/29/2005

GE Plastics

Xylex* Resin X7200

Americas: COMMERCIAL

TYPICAL PROPERTIES [1]	TYPICAL VALUE	UNIT	STANDARD
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	90	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.05E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.05E-04	1/°C	ASTM E 831
Thermal Conductivity	0.23	W/m-°C	ISO 8302
CTE, 23°C to 60°C, flow	8.E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	8.E-05	1/°C	ISO 11359-2
Ball Pressure Test, approximate maximum	105	°C	IEC 60695-10-2
Vicat Softening Temp, Rate B/120	115	°C	ISO 306
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	99	°C	ISO 75/Ae
PHYSICAL			
Specific Gravity	1.2	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.7	%	GE Method
Mold Shrinkage, xflow, 3.2 mm	0.5 - 0.7	%	GE Method
Melt Flow Rate, 265°C/2.16kg	12	g/10 min	ASTM D 1238
Density	1.18	g/cm³	ISO 1183
Melt Volume Rate, MVR at 265°C/2.16 kg	12	cm³/10 min	ISO 1133
OPTICAL			
Light Transmission	88	%	ASTM D 1003
Haze	1.1	%	ASTM D 1003
Refractive Index	1.557	-	ISO 489
ELECTRICAL			
Volume Resistivity	> 1.E+15	Ohm-cm	ASTM D 257
Surface Resistivity	> 1.E+15	Ohm	ASTM D 257
Comparative Tracking Index (UL) {PLC}	0	PLC Code	UL 746A
FLAME CHARACTERISTICS			
Glow Wire Flammability Index 750°C, passes at	1	mm	IEC 60695-2-12

1) Typical values only. Variations within normal tolerances are possible for variose colours.All values are measured at least after 48 hours storage at 230C/50% relative humidity.
All properties, expect the melt volume rate are measured on injection moulded samples.
All samples are prepared according to ISO 294.

2) Only typical data for material selection purpose.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) Own measurement according to UL.

Source, GMD, Last Update:09/29/2005

GE Plastics

Xylex* Resin X7200

Americas: COMMERCIAL

PROCESSING PARAMETERS	TYPICAL VALUE	UNIT
Injection Molding		
Drying Temperature	80 - 95	°C
Drying Time	3 - 5	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	250 - 270	°C
Nozzle Temperature	250 - 270	°C
Front - Zone 3 Temperature	250 - 270	°C
Middle - Zone 2 Temperature	245 - 265	°C
Rear - Zone 1 Temperature	240 - 250	°C
Mold Temperature	45 - 60	°C
Back Pressure	0.2 - 0.5	MPa
Screw Speed	20 - 100	rpm
Shot to Cylinder Size	40 - 80	%
Vent Depth	0.013 - 0.02	mm

1) Typical values only. Variations within normal tolerances are possible for variose colours.All values are measured at least after 48 hours storage at 230C/50% relative humidity.
All properties, expect the melt volume rate are measured on injection moulded samples.
All samples are prepared according to ISO 294.

2) Only typical data for material selection purpose.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) Own measurement according to UL.

Source, GMD, Last Update:09/29/2005