SABIC Innovative Plastics™

Xenoy* Resin X3515

Americas: COMMERCIAL

Flame Retardant, Impact Modified, Opaque, Designed for outdoor telecommunication enclosure applications.

TYPICAL PROPERTIES [1]	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	530	kgf/cm²	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	420	kgf/cm²	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	4.3	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	44	%	ASTM D 638
Tensile Modulus, 5 mm/min	21900	kgf/cm²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	730	kgf/cm²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	18900	kgf/cm²	ASTM D 790
Tensile Stress, yield, 50 mm/min	47	MPa	ISO 527
Tensile Stress, break, 50 mm/min	40	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4.1	%	ISO 527
Tensile Strain, break, 50 mm/min	58	%	ISO 527
Tensile Modulus, 1 mm/min	1960	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	71	MPa	ISO 178
Flexural Modulus, 2 mm/min	1890	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	76	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -20°C	70	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	45	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -40°C	43	cm-kgf/cm	ASTM D 256
Instrumented Impact, Energy @ peak, -20°C	570	cm-kgf	ASTM D 3763
Instrumented Impact Energy @ peak, -30	713	cm-kgf	ASTM D 3763
Instrumented Impact Energy @ peak, -40°C	754	cm-kgf	ASTM D 3763

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 this or any other material under actual fire conditions.
4) Own measurement according to UL.

Source, GMD, Last Update:08/22/2006

SABIC Innovative Plastics™

سابك sabic

Xenoy* Resin X3515

Americas: COMMERCIAL

TYPICAL PROPERTIES [1]	TYPICAL VALUE	UNIT	STANDARD
IMPACT			
Instrumented Impact Total Energy, 23°C	632	cm-kgf	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	53	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 0°C	47	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -10°C	43	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	40	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	53	kJ/m²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	120	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	110	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	74	°C	ASTM D 648
HDT, 0.45 MPa, 6.4 mm, unannealed	123	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	95	°C	ASTM D 648
CTE, -40°C to 40°C, flow	9.8E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	9.8E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.E-04	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	120	°C	ISO 306
Vicat Softening Temp, Rate B/120	122	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	114	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	88	°C	ISO 75/Af
Relative Temp Index, Elec	75	°C	UL 746B
Relative Temp Index, Mech w/impact	75	°C	UL 746B
Relative Temp Index, Mech w/o impact	75	°C	UL 746B
PHYSICAL			
Specific Gravity	1.3	-	ASTM D 792

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 this or any other material under actual fire conditions.
4) Own measurement according to UL.

Source, GMD, Last Update:08/22/2006

SABIC Innovative Plastics™

سابك sabic

Xenoy* Resin X3515

Americas: COMMERCIAL

TYPICAL PROPERTIES [1]	TYPICAL VALUE	UNIT	STANDARD
PHYSICAL			
Mold Shrinkage, flow, 3.2 mm	0.8 - 1	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm	0.8 - 1	%	SABIC Method
Melt Flow Rate, 250°C/2.16 kgf	4.8	g/10 min	ASTM D 1238
Melt Flow Rate, 250°C/5.0 kgf	15.1	g/10 min	ASTM D 1238
Melt Flow Rate, 265°C/2.16kg	8	g/10 min	ASTM D 1238
Melt Flow Rate, 266°C/5.0 kgf	26.7	g/10 min	ASTM D 1238
Density	1.3	g/cm³	ISO 1183
Water Absorption, (23°C/sat)	0.5	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62
Melt Flow Rate, 250°C/2.16 kg	4	g/10 min	ISO 1133
Melt Flow Rate, 250°C/5.0 kg	15	g/10 min	ISO 1133
Melt Volume Rate, MVR at 250°C/2.16 kg	4	cm³/10 min	ISO 1133
Melt Volume Rate, MVR at 250°C/5.0 kg	13	cm³/10 min	ISO 1133
Melt Volume Rate, MVR at 265°C/2.16 kg	7	cm³/10 min	ISO 1133
Melt Volume Rate, MVR at 265°C/5.0 kg	23	cm³/10 min	ISO 1133
ELECTRICAL			
Arc Resistance, Tungsten {PLC}	5	PLC Code	ASTM D 495
Hot Wire Ignition {PLC}	2	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	2	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	0	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Compliant, 94V-0 Flame Class Rating (3)(4)	1.47	mm	UL 94 by GE
UL Compliant, 94-5VA Rating (3)(4)	2.99	mm	UL 94 by GE
Oxygen Index (LOI)	28	%	ISO 4589

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 this or any other material under actual fire conditions.
4) Own measurement according to UL.

Source, GMD, Last Update:08/22/2006

SABIC Innovative Plastics™

سابك sabic

Xenoy* Resin X3515

Americas: COMMERCIAL

PROCESSING PARAMETERS	TYPICAL VALUE	UNIT
Injection Molding		
Drying Temperature	120	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	12	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	250 - 265	°C
Nozzle Temperature	245 - 260	°C
Front - Zone 3 Temperature	250 - 265	°C
Middle - Zone 2 Temperature	245 - 260	°C
Rear - Zone 1 Temperature	240 - 255	°C
Mold Temperature	50 - 75	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	50 - 100	rpm
Shot to Cylinder Size	40 - 80	%
Vent Depth	0.025 - 0.038	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 this or any other material under actual fire conditions.
4) Own measurement according to UL.

Source, GMD, Last Update:08/22/2006