

Revision 20241022

LEXAN™ COPOLYMER XHT4141

REGION AMERICAS

DESCRIPTION

XHT4141 is a high flow, high heat polycarbonate copolymer. It is available in a range of opaque and limited transparent colors.

TYPICAL PROPERTY VALUES

MECHANICALViewViewTensile Stras, yid, Type I, 50 mm/min77MPaATM D638Tensile Strain, yid, Type I, 50 mm/min69MPaATM D638Tensile Strain, yid, Type I, 50 mm/min50%ATM D638Tensile Strain, yid, Type I, 50 mm/min50%ATM D638Tensile Modulus, 51 mm /min, 50 mm span2730MPaATM D790Flexural Strass, yid, 13 mm /min, 50 mm span2600MPaATM D790Tensile Stras, inces, 50 mm/min78MPa650 527Tensile Stras, inces, 50 mm/min78MPa650 527Tensile Stras, inces, 50 mm/min60%MS650 527Tensile Stras, inces, 50 mm/min60%MS650 527Tensile Stras, inces, 50 mm/min200MPa800 527Tensile Modulus, 2 mm /min80MPa650 527Tensile Modulus, 2 mm	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Tensile Stress, bit, Type I, S0 mm/min69MPaASTM D638Tensile Strain, bit, Type I, S0 mm/min7%ASTM D638Tensile Strain, bit, Type I, S0 mm/min50%ASTM D638Tensile Strain, bits, Type I, S0 mm /min2730MPaASTM D638Flexural Stress, yidd, 13 mm /min, 50 mm span2600MPaASTM D790Flexural Modulus, 1.3 mm /min, 50 mm span2600MPaASTM D790Tensile Stress, yidd, 50 mm /min67MPaB50 527Tensile Stress, break, 50 mm /min7%S50 527Tensile Stress, break, 50 mm /min7%S50 527Tensile Stress, break, 50 mm /min2750MPaS50 527Tensile Stress, break, 50 mm /min2750MPaS50 527Tensile Modulus, 2 mm /min2750MPaS50 527Flexural Modulus, 2 mm /min2750MPaS50 527Tensile Modulus, 2 mm /min80MPaS50 527Tensile Modulus, 2 mm /min80S50 527S50 527Tensile Modulus, 2 mm /minS50 527S50 527S50 527Tensile Modulus, 2 mm /minS50 527S50 527S50 527Tensile Modulus, 2 mm /minS50 527<	MECHANICAL ⁽¹⁾			
Tensile Strain, brd, Type I, 50 mm/min7%%1M 0638Tensile Strain, brk, Type I, 50 mm/min50%ATM 0638Tensile Strain, brk, Type I, 50 mm/min2730MPaATM 0638Flexural Stress, Vield, 1.3 mm/min, 50 mm span2600MPaATM 0790Tensile Strain, yield, 50 mm/min2600MPa05027Tensile Strain, yield, 50 mm/min7%05027Tensile Strain, yield, 50 mm/min7%05027Tensile Strain, yield, 50 mm/min7%05027Tensile Strain, yield, 50 mm/min7%05027Tensile Strain, yield, 50 mm/min2750%0527Tensile Strain, yield, 50 mm/min2700%05027Tensile Strain, yield, 20 mm/min2700%05027Tensile Strain, yield, 50 mm/min2700%05027Tensile Strain, yield, 50 mm/min8000%05027Tensile Strain, yield, 50 mm/min9%%05027Tensile Strain, yield, 50 mm/min80%%05010Tensile Strain, yield, 50 mm/min80%%05010Tensile Strain, yield, 50 mm/min80%%%05010Tensile Strain, yield, 50 mm/min80	Tensile Stress, yld, Type I, 50 mm/min	77	MPa	ASTM D638
Tensile Strain, bet, Type I, 50 mn/min50%ATM D638Tensile Modulus, 5 mn/min2730MPaASTM D638Flexural Stress, yiel, 1,3 mn/min, 50 mn span120MPaASTM D790Tensile Stress, yield, 50 mn/min78MPaS0 527Tensile Stress, yield, 50 mn/min7%S0 527Tensile Stress, yield, 50 mn/min7%S0 527Tensile Stress, yield, 50 mn/min7%S0 527Tensile Strain, yield, 50 mn/min7%S0 527Tensile Strain, yield, 50 mn/min2750MPaS0 527Tensile Modulus, 2 mn/min80MPaS0 178Flexural Modulus, 2 mn/min80MPaS0 178Flexural Modulus, 2 mn/min80MPaS0 178Tensile Modulus, 2 mn/min9J/mASTM D256Instrumented Dart Impact Total Energy, 23°C72JASTM D3763Izod Impact, notched, 30°C71/mASTM D3763Izod Impact, notched 80°10'3 42°C8M/m ² S0 180/10Izod Impact, notched 80°10'3 42°C8M/m ² S0 180/10Izod Impact, notched 80°10'3 spe52mm10M/m ² S0 180/14Izod Impact, notched Edges 80°10'3 spe52mmN8M/m ² S0 180/14Izod Impact, notched B0°10'3 spe52mmN8M/m ² S0 179/14Izod Impact, notched Edges 80°10'3 spe52mmN8M/m ² S0 179/14Charpy 30°C, Vnotch Edges 80°10'3 spe52mmN8M/m ² S0 179/14THENG, Signer, Sig	Tensile Stress, brk, Type I, 50 mm/min	69	MPa	ASTM D638
Tensile Modulus, 5 mm/min2730MPaASTM D638Flexural Stress, yid, 1.3 mm/min, 50 mm span120MPaASTM D790Flexural Modulus, 1.3 mm/min, 50 mm span2600MPaS05 27Tensile Stress, yield, 50 mm/min67MPaISO 527Tensile Stress, break, 50 mm/min50%ISO 527Tensile Stress, yield, 50 mm/min50%ISO 527Tensile Strain, break, 50 mm/min50%ISO 527Tensile Strain, break, 50 mm/min60MPaISO 527Tensile Modulus, 2 mm/min80MPaISO 178Flexural Stress, yield, 2 mm/min80MPaISO 178Tensile Modulus, 2 mm/min600MPaISO 178Instrumented Dart Impact, notched, 23°C72JASTM D256Izod Impact, notched, 30°C72JASTM D3763Izod Impact, notched 80°10°3 +23°C72JASTM D3763Izod Impact, notched 80°10°3 +23°C8K/m ² ISO 180/10Izod Impact, notched 80°10°3 +23°C8K/m ² ISO 180/14Izod Impa	Tensile Strain, yld, Type I, 50 mm/min	7	%	ASTM D638
Flexural Stress, yiel, 1.3 mm/min, 50 mm span120MPaASTM D790Flexural Modulus, 1.3 mm/min, 50 mm span2600MPaASTM D790Tensile Stress, yield, 50 mm/min78MPa80 527Tensile Strain, yield, 50 mm/min67%60 527Tensile Strain, yield, 50 mm/min70%80 527Tensile Strain, yield, 50 mm/min2750MPa80 527Tensile Strain, break, 50 mm/min2750MPa80 527Flexural Modulus, 1 mm/min2750MPa80 577Flexural Modulus, 2 mm/min600MPa80 78Flexural Modulus, 2 mm/min600MPa80 78Flexural Modulus, 2 mm/min600MPa80 78Load Impact, notched, 33°C93J/mASTM D256Izod Impact, notched, 30°C76J/mMS10 256Izod Impact, notched, 80°10°3 +23°CN8J/mS0 180/14Izod Impact, notched 80°10°3 +23°CN8J/mS0 180/14Izod Impact, notched 80°10°3 +23°CN8J/mAS0 180/14Izod Impact, notched 80°10°3 +23°CN8J/mAS0 180/14Izod Impact, notched 80°10°3 +23°CN8J/mAS0 180/14Izod Impact, notched 60°10°3 +23°CN8J/mAS0 180/14Izod Impact, notched 80°10°3 +26°LNS0 197/140S0 197/140Izod Impact, notched 60°10°3 +23°CNS0 197/140S0 197/140Izod Impact, notched 60°10°3 +26°LNS0 197/140S0 197/140Izod Impact, notche 60	Tensile Strain, brk, Type I, 50 mm/min	50	%	ASTM D638
Pexaral Modulus, 1.3 mm/min, 50 mm span2600MPaASTM D790Tensile Stress, break, 50 mm/min78MPaS0 527Tensile Stress, break, 50 mm/min70%aS0 527Tensile Strain, yield, 50 mm/min50%aS0 527Tensile Strain, spied, 50 mm/min50%aS0 527Tensile Strain, spied, 50 mm/min50%aS0 527Tensile Strain, spied, 2 mm/min80MPaS0 527Tensile Strain, spied, 2 mm/min80MPaS0 527Tensile Strain, spied, 2 mm/min80MPaS0 527Tensile Strain, spied, 2 arm/min80MPaS0 178Tensile Strain, spied, 2 arm/min80MPaS0 178Tensile Strain, spied, 2 arm/min80MPaS0 178Tensile Strain, spied, 2 arm/min76MPaMSTensile Strain, spied, 2 arm/min76MSMSTensile Strain, spied, 2 arm/min76MSMSTensile Strain, spied, 2 arm/min72MSMSTensile Strain, spied, 2 arm/min72MSMSTensile Strain, spied, 2 arm/min72MSMSTensile Strain, spied, 2 arm/min72MSMSTensile Strain, spied, 2 arm/min80MpaS0 180/10Tensile Strain, spied, 2 arm/min80MpaS0 180/10Tensile Strain, spied, 2 arm/min9MpaS0 180/10Tensile Strain, spied, 2 arm/min80MpaS0 179/10Tensile Strain, spied, 2	Tensile Modulus, 5 mm/min	2730	MPa	ASTM D638
Tensile Stress, yield, 50 mm/min78№Pa№50 527Tensile Strain, yield, 50 mm/min70%1№50 527Tensile Strain, yield, 50 mm/min70%2№50 527Tensile Modulus, 1 mm/min2750№A№50 527Fexural Stress, yield, 2 mm/min80№70№50 527Fexural Stress, yield, 2 mm/min80№70№50 527Tensile Modulus, 2 mm/min2600№A№50 178Instrement Officity960№70№50 527Instrement Officity960№70№50 527Instrement Officity960№70№50 527Instrement Officity960№70№50 527Instrement Officity960№70№70Instrement Officity970№70№70Instrement Officity970№70№70Izod Impact, notched 80°10°3 +23°C№70№70№70Izod Impact, notched 80°10°3 +23°C№70№70№70Izod Impact, notched 80°10°3 +23°C№70№70№70Izod Impact, notched 80°10°3 +23°C№70№70№70Izod Impact, notched 80°10°3 +26°E№70№70№70Charpy 30°C, Vnotch Edgew 80°10°3 spe62mm№70№70№70Itomation Officity№70№70№70№70HOT, 0.45 MPA, 3.2 mm, unannealed№70№70№70HOT, 0.45 MPA, 3.2 mm, unannealed№70№70№70Itomation Officity№70№70№70№70Itomation Officity<	Flexural Stress, yld, 1.3 mm/min, 50 mm span	120	MPa	ASTM D790
Tensile Stress, break, 50 mm/min67MPaIs0 527Tensile Strain, break, 50 mm/min50%S0 527Tensile Modulus, 1 mm/min2750MPaS0 527Rexural Modulus, 2 mm/min2600MPaS0 178Tensile Stress, yield, 2 mm/min2600MPaS0 178Itexural Modulus, 2 mm/min2600MPaS0 180Itexural Modulus, 2 mm/min2600MPaS0 180Itexural Modulus, 2 mm/min2600MPaS0 180Itexural Modulus, 2 mm/min93J/mMT 256Itexural Modulus, 2 mm/minS0 180/14S0 180/14Itexural Modulus, 2 mm/minS0 180/14S0 180/14Itexural Modulus, 2 mm/minS0 180/14S0 180/14Itexural Modulus, 2 mm/minS0 180/14S0 180/14Itex Motched 80'10'3 +23'CNMm ² S0 180/14Itex Motched 80'10'3 +23'CS0 180/14Mm ² S0 180/14Itex Motched 80'10'3 +23'CS0 180/14Mm ² S0 180/14Itex Motched 80'10'3 +23'CNMm ² S0 179/144Itex Motched 80'10'3 +26'EmmNMm ² S0 179/144Itex Motched 80'10'3 +26'EmmNMm ² S0 179/144Itex Motched 80'10'3 +26'EmmNMm ² S0 179/144	Flexural Modulus, 1.3 mm/min, 50 mm span	2600	MPa	ASTM D790
Tensile Strain, yield, 50 mm/min7%Sto 527Tensile Modulus, 1 mm/min50%Sto 527Tensile Modulus, 1 mm/min2750MPaSto 527Flexural Modulus, 2 mm/min600MPaSto 78Texural Modulus, 2 mm/min600MPaSto 78Texural Modulus, 2 mm/min600MPaSto 78Texural Modulus, 2 mm/min76J/mATM D256Izod Impact, notched, 30°C76J/mSto 180/14Instrumented Dart Impact Total Energy, 23°C72JATM D3763Izod Impact, unotched 80°10°3 +23°CN8Kl/m²Sto 180/14Izod Impact, unotched 80°10°3 +23°C10Kl/m²Sto 180/14Izod Impact, unotched 80°10°3 +23°C8Kl/m²Sto 180/14Izod Impact, unotched 80°10°3 +262m10Kl/m²Sto 180/14Izod Impact, unotched 80°10°3 +262m8Kl/m²Sto 180/14Izod Impact, unotched 80°10°3 +262m9Kl/m²Sto 180/14Izod Impact, unotched 80°10°3 +262m10Kl/m²Sto 179/1eACharpy 23°C, Unotch Edgew 80°10°3 sp=62mmNBKl/m²Sto 179/1eACharpy 23°C, Unotch Edgew 80°10°3 sp=62mmNBKl/m²Sto 179/1eATHEXML ¹¹ YSto 179/1eASto 179/1eACharpy 23°C, Unotch Edgew 80°10°3 sp=62mmNBKl/m²Sto 179/1eACharpy 23°C, Unotch Edgew 80°10°3 sp=62mmNBKl/m²Sto 180/14THEXML ¹¹ YSto 180/14Sto 180/14Sto 180/14 <td< td=""><td>Tensile Stress, yield, 50 mm/min</td><td>78</td><td>MPa</td><td>ISO 527</td></td<>	Tensile Stress, yield, 50 mm/min	78	MPa	ISO 527
Tensile Strain, break, 50 mm/min50%S0 527Tensile Modulus, 1mm/min2750MPaIS0 527Flexural Stress, yield, 2 mm/min80MPaIS0 178Flexural Modulus, 2 mm/min2600MPaIS0 1781MPaIS0 1781MPaS0 178931/mASTM 0256721ASTM 0256721S0 180/10NBKl/m ² IS0 180/10NBKl/m ² IS0 180/10NBKl/m ² IS0 180/1010Kl/m ² IS0 180/1011Kl/m ² IS0 180/1411Kl/m ² IS0 179/1eANBKl/m ² IS0 179/1e	Tensile Stress, break, 50 mm/min	67	MPa	ISO 527
Tensile Modulus, 1 mm/min2750MPa50 527Flexural Stress, yield, 2 mm/min80MPa50 178Flexural Modulus, 2 mm/min2600MPa50 178Impact ¹¹ Impact MarkSol 78Izod Impact, notched, 23°C93J/mASTM D256Instruented Dat Impact Total Energy, 23°C76JASTM D256Izod Impact, notched 80°10°3 +23°CNBKl/m²S0 180/10Izod Impact, notched 80°10°3 +23°CNBKl/m²S0 180/10Izod Impact, notched 80°10°3 -30°C80Kl/m²S0 180/10Izod Impact, notched 80°10°3 -39°C80Kl/m²S0 180/10Izod Impact, notched 80°10°3 -39°C80Kl/m²S0 180/10Izod Impact, notched 80°10°3 -39°C80Kl/m²S0 180/10Izod Impact, notched 80°10°3 -92°C80S0 180S0 180/10Izod Impact, notched 80°10°3 -92°C80S0 180/10S0 180/10Izod Impact, notched 80°10°3 -92°C80S0 180/10S0 180/10Izod Impact, notched 80°10°3 -92°C80S0 180/10S0 180/10Izod Impact, notche Edgew 80°10°3 -92°E93S0 180/10S0 179/1eACharpy 30°C, Vnotch Edgew 80°10°3 -92°E8080S0 179/1eAItomat Charpy 40°C, Unnotch Edgew 80°10°3 -92°E80S0 180S0 179/1eAItomat Charpy 40°C, Unnotch Edgew 80°10°3 -92°E818381Itomat Charpy 40°C, Unnotch Edgew 80°10°3 -92°E818181Itomat Charpy 40°C, Charpy 40°C8181 <td>Tensile Strain, yield, 50 mm/min</td> <td>7</td> <td>%</td> <td>ISO 527</td>	Tensile Strain, yield, 50 mm/min	7	%	ISO 527
Flexaral Stress, yield, 2 mm/min80MPaIs 0178Flexaral Modulus, 2 mm/min2600MPaIs 0178IxpAcr ⁽¹⁾ Ixmassing and the stress of t	Tensile Strain, break, 50 mm/min	50	%	ISO 527
Hexaral Moduls, 2 mm/min2600MPa150 178IMPACT ⁽¹⁾ JimASTM D256Izod Impact, notched, 23°C93J/mASTM D256Izod Impact, notched, 30°C76J/mASTM D256Instrumented Dart Impact Total Energy, 23°C72JASTM D3763Izod Impact, unnotched 80°10°3 +23°CNBK/m²ISO 180/10Izod Impact, notched 80°10°3 spe3cm9K/m²ISO 180/10Izod Impact, notched 80°10°3 spe3cm9K/m²ISO 179/1eACharpy 23°C, Vnotch Edgew 80°10°3 spe3cmNBK/m²ISO 179/1eACharpy 30°C, Vnotch Edgew 80°10°3 spe3cmNBK/m²ISO 180/1CHERMAL ¹¹ ISO 180/1CISO 180/1CISO 180/1CISO 180/1CCharpy 30°C, Vnotch Ed	Tensile Modulus, 1 mm/min	2750	MPa	ISO 527
IMPACT ⁽¹⁾ Izod Impact, notched, 23°C93J/mASTM D256Izod Impact, notched, 30°C76J/mASTM D256Instrumented Dart Impact Total Energy, 23°C72JASTM D3763Izod Impact, unnotched 80°10°3 +23°CN8KJ/m²ISO 180/10Izod Impact, notched 80°10°3 +23°CN8KJ/m²ISO 180/10Izod Impact, notched 80°10°3 +23°C10KJ/m²ISO 180/14Izod Impact, notched 80°10°3 spe62mm8KJ/m²ISO 180/14Charpy 23°C, Vnotch Edgew 80°10°3 spe62mm9KJ/m²ISO 179/14ACharpy 23°C, Unnotch Edgew 80°10°3 spe62mmN8KJ/m²ISO 180/14ACharpy 24°C, Unnotch Edgew 80°10°3 spe62mmISO 180/14AISO 180/14A </td <td>Flexural Stress, yield, 2 mm/min</td> <td>80</td> <td>MPa</td> <td>ISO 178</td>	Flexural Stress, yield, 2 mm/min	80	MPa	ISO 178
izod impact, notched, 23°C93J/mATM D256izod impact, notched, 30°C76J/mATM D256istrumented Dart impact Total Energy, 23°C72JATM D3763izod impact, unnotched 80°10°3 +23°CNBKlm²ISO 180/10izod impact, notched 80°10°3 +23°CNBKlm²ISO 180/10izod impact, notched 80°10°3 +23°C10Klm²ISO 180/10izod impact, notched 80°10°3 +23°C8Klm²ISO 180/10izod impact, notched 80°10°3 +262mm10Klm²ISO 180/10Charpy 23°C, Vnotch Edgew 80°10°3 sp=62mmNBKlm²ISO 179/14Charpy 30°C, Unnotch Edgew 80°10°3 sp=62mmNBKlm²ISO 179/14Charpy 30°C, Unnotch Edgew 80°10°3 sp=62mmNBKlm²ISO 179/14Charpy 30°C, Unnotch Edgew 80°10°3 sp=62mmNBKlm²ISO 179/14Charpy 40°C, Unnotch Edgew 80°10°3 sp=62mmNBKlm²ISO 179/14Charpy 40°C, Unnotch Edgew 80°10°3 sp=62mmNBKlm²ISO 179/14Charpy 40°C, Unnotch Edgew 80°10°3 sp=62mmNBKlm²ISO 189/14Charpy 40°C, Unnotch Edgew 80°10°3 sp=62mmNBKlm²ISO 189/14Charpy 40°C, Unnotch Edgew 80°10°3 sp=62mmISO 800SIM D648ISO	Flexural Modulus, 2 mm/min	2600	MPa	ISO 178
Izod Impact, notched. 30°C76J/mASTM D256Instrumented Dart Impact Total Energy. 23°C72JASTM D3763Izod Impact, unnotched 80°10°3 +23°CNBKJ/m²ISO 180/10Izod Impact, notched 80°10°3 +23°C10KJ/m²ISO 180/10Izod Impact, notched 80°10°3 +23°C10KJ/m²ISO 180/14Izod Impact, notched 80°10°3 +23°C8KJ/m²ISO 180/14Izod Impact, notched 80°10°3 sp=62mm11KJ/m²ISO 180/14Charpy 23°C, Vnotch Edgew 80°10°3 sp=62mm9KJ/m²ISO 179/1eACharpy 23°C, Unnotch Edgew 80°10°3 sp=62mmNBKJ/m²ISO 179/1eACharpy 23°C, Unnotch Edgew 80°10°3 sp=62mmISO 180KJ/m²ISO 189/1eADT, 1.82 MPA, 3.2 mm, unannealed16CA STM D648CTE, 40°	IMPACT ⁽¹⁾			
Instrumented Dart Impact Total Energy, 23°C721ASTM D3763izod impact, unnotched 80°10°3 +23°CNBkl/m2Iso 180/10izod impact, unnotched 80°10°3 +23°CNBkl/m2Iso 180/10izod impact, notched 80°10°3 +23°C0kl/m2Iso 180/10izod impact, notched 80°10°3 +23°C10kl/m2Iso 180/10izod impact, notched 80°10°3 +23°C8kl/m2Iso 180/10izod impact, notched 80°10°3 +23°C8kl/m2Iso 180/10izod impact, notched 80°10°3 spe62mm9kl/m2Iso 179/1eACharpy 30°C, V-notch Edgew 80°10°3 spe62mmNBkl/m2Iso 179/1eACharpy 30°C, Unnotch Edgew 80°10°3 spe62mmNBkl/m2Iso 179/1eATHERMAL ⁽¹⁾ So 179/1eAIso 179/1eATherman Sub C, Ling C	Izod Impact, notched, 23°C	93	J/m	ASTM D256
Izod Impact, unnotched 80°10°3 +23°C NB kl/m² ISO 180/1U Izod Impact, unnotched 80°10°3 -30°C NB kl/m² ISO 180/1U Izod Impact, notched 80°10°3 -30°C 10 kl/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 8 kl/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 8 kl/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm 11 kl/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80°10°3 sp=62mm NB kl/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kl/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kl/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kl/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kl/m² ISO 179/1eA THERMAL ⁽¹⁾ Sto 79/1eU ISO 179/1eU THERMAL ⁽¹⁾ Sto 79/1eU Sto 79/1eU ThERMAL ⁽¹⁾ Sto 79/1eU Sto 79/1eU ThERMAL ⁽¹⁾	Izod Impact, notched, -30°C	76	J/m	ASTM D256
izod Impact, unnotched 80*10*3-30°C NB kl/m2 ISO 180/10 izod Impact, notched 80*10*3 +23°C 10 kl/m2 ISO 180/1A izod Impact, notched 80*10*3 -30°C 8 kl/m2 ISO 180/1A Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm 11 kl/m2 ISO 179/1eA Charpy 30°C, V-notch Edgew 80*10*3 sp=62mm 9 kl/m2 ISO 179/1eA Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm NB kl/m2 ISO 179/1eA Charpy 30°C, Unnotch Edgew 80*10*3 sp=62mm NB kl/m2 ISO 179/1eA Charpy 30°C, Unnotch Edgew 80*10*3 sp=62mm NB kl/m2 ISO 179/1eU THERMAL ⁽¹⁾ . ISO 179/1eU ISO 179/1eU Vicat Softening Temp, Rate B/50 183 °C ASTM D1525 HDT, 1.82 MPa, 3.2 mm, unannealed 174 °C ASTM D648 CTE, 40°C to 40°C, flow 6.E05 1/°C ASTM D648 CTE, 40°C to 40°C, flow 6.E05 1/°C ASTM E831 CTE, 40°C to 40°C, flow 6.E05 1/°C ASTM C177 CTE, 40°C to 40°C, flow 6.E0	Instrumented Dart Impact Total Energy, 23°C	72	J	ASTM D3763
izod Impact, notched 80*10*3 +23°C 10 k/m² ISO 180/1A izod Impact, notched 80*10*3 -30°C 8 k/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm 11 k/m² ISO 179/1eA Charpy 30°C, V-notch Edgew 80*10*3 sp=62mm 9 k/m² ISO 179/1eA Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm NB k/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB k/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB k/m² ISO 179/1eU THERMAL ⁽¹⁾ Viat Softening Temp, Rate B/50 183 °C ASTM D1525 Vicat Softening Temp, Rate B/50 183 °C ASTM D648 HDT, 0.45 MPa, 3.2 mm, unannealed 174 °C ASTM D648 GTE, 40°C to 40°C, flow 6.E05 1/°C ASTM E831 GTE, 40°C to 40°C, flow 6.E05 1/°C ASTM E831 Thermal Conductivity @ 25°C 0.2 W/m·°C ASTM C177 GTE, 40°C to 40°C, flow 6.E05 1/°C SD11359-2	Izod Impact, unnotched 80*10*3 +23°C	NB	kJ/m²	ISO 180/1U
izod Impact, notched 80°10°3 -30°C8kl/m2ISO 180/1ACharpy 23°C, V-notch Edgew 80°10°3 sp=62mm11kl/m2ISO 179/1eACharpy 30°C, V-notch Edgew 80°10°3 sp=62mm9kl/m2ISO 179/1eACharpy 23°C, Unnotch Edgew 80°10°3 sp=62mmNBkl/m2ISO 179/1eUCharpy -30°C, Unnotch Edgew 80°10°3 sp=62mmNBKl/m2ISO 179/1eUTHERMAL ⁽¹⁾ YYSASTM D648HDT, 1.82 MPa, 3.2 mm, unannealed165°CASTM D648CTE, 40°C to 40°C, flow6.E051/°CASTM E831CTE, 40°C to 40°C, flow6.E051/°CASTM E331CTE, 40°C to 40°C, flow6.E051/°CSO 11359-2	Izod Impact, unnotched 80*10*3 -30°C	NB	kJ/m²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm11k/m²ISO 179/1eACharpy -30°C, V-notch Edgew 80°10°3 sp=62mm9k/m²ISO 179/1eACharpy 23°C, Unnotch Edgew 80°10°3 sp=62mmNBk/m²ISO 179/1eUCharpy -30°C, Unnotch Edgew 80°10°3 sp=62mmNBKISD 179/1eUTHERMAL ⁽¹⁾ KISD 179/1eUSD 179/1eUSD 179/1eUVicat Softening Temp, Rate B/50183163°CASTM D1525HDT, 1.82 MPa, 3.2 mm, unannealed165°CASTM D648SD 1350CTE, 40°C to 40°C, flow6.E051/°CASTM E831SD 1350-2CTE, 40°C to 40°C, flow6.E051/°CSD 1359-2SD 1359-2CTE, 40°C to 40°C, flow6.E051/°CSD 1359-2	Izod Impact, notched 80*10*3 +23°C	10	kJ/m²	ISO 180/1A
Charpy -30°C, V-notch Edgew 80°10'3 sp=62mm9kl /m2ISO 179/1eACharpy 23°C, Unnotch Edgew 80°10'3 sp=62mmNBkl /m2ISO 179/1eUCharpy -30°C, Unnotch Edgew 80°10'3 sp=62mmNBKl /m2ISO 179/1eUVicat Softening Temp, Rate B/50183°CASTM D648HDT, 0.45 MPa, 3.2 mm, unannealed165°CASTM D648CTE, 40°C to 40°C, flow6.E-051/°CASTM E831CTE, 40°C to 40°C, flow0.2NEYIII SUCTE, 40°C to 40°C, flow6.E-051/°CSO 11359-2CTE, 40°C to 40°C, flow6.E-051/°CSO 11359-2	Izod Impact, notched 80*10*3 -30°C	8	kJ/m²	ISO 180/1A
Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mmNBkJ /m²ISO 179/1eUCharpy 30°C, Unnotch Edgew 80°10°3 sp=62mmNBkJ /m²ISO 179/1eUTHERMAL (1)Vicat Softening Temp, Rate B/50183°CASTM D1525HDT, 0.45 MPa, 3.2 mm, unannealed174°CASTM D648HDT, 1.82 MPa, 3.2 mm, unannealed6.6-051/°CASTM D648CTE, -40°C to 40°C, flow6.6-051/°CASTM E831CTE, 40°C to 40°C, flow0.2V/m.°CASTM E831CTE, 40°C to 40°C, flow6.6-051/°CSTM E331CTE, 40°C to 40°C, flow6.6-051/°C1/°CCTE, 40°C to 40°C, flow6.6-051/°C <t< td=""><td>Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm</td><td>11</td><td>kJ/m²</td><td>ISO 179/1eA</td></t<>	Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	11	kJ/m²	ISO 179/1eA
Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mmNBkJ /m²ISO 179/1eUTHERMAL (1)ISO 179/1eUISO 179/1eUVicat Softening Temp, Rate B/50183°CASTM D1525HDT, 0.45 MPa, 3.2 mm, unannealed174°CASTM D648HDT, 1.82 MPa, 3.2mm, unannealed6.6-051/°CASTM D648CTE, -40°C to 40°C, flow6.6-051/°CASTM E831CTE, 40°C to 40°C, xflow6.6-051/°CASTM E831Thermal Conductivity @ 25 °C0.2W/m.°CASTM C177CTE, -40°C to 40°C, flow6.6-051/°CSO 11359-2	Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	9	kJ/m²	ISO 179/1eA
THERMAL ⁽¹⁾ Thermal Conductivity @ 25 °C ASTM D1525 Vicat Softening Temp, Rate B/50 183 °C ASTM D1525 HDT, 0.45 MPa, 3.2 mm, unannealed 174 °C ASTM D648 HDT, 1.82 MPa, 3.2 mm, unannealed 165 °C ASTM D648 CTE, -40°C to 40°C, flow 6.E·05 1/°C ASTM E831 CTE, 40°C to 40°C, flow 6.E·05 1/°C ASTM E831 Themal Conductivity @ 25 °C 0.2 W/m °C ASTM C177 CTE, 40°C to 40°C, flow 6.E·05 1/°C SOT 11359-2	Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m²	ISO 179/1eU
Vicat Softening Temp, Rate B/50 183 °C ASTM D1525 HDT, 0.45 MPa, 3.2 mm, unannealed 174 °C ASTM D648 HDT, 1.82 MPa, 3.2mm, unannealed 165 °C ASTM D648 CTE, 40°C to 40°C, flow 6.605 1/°C ASTM E831 Themal Conductivity@25°C 0.2 W/m.°C ASTM C177 CTE, 40°C to 40°C, flow 6.605 1/°C SOT 1359-2	Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m²	ISO 179/1eU
HDT, 0.45 MPa, 3.2 mm, unannealed 174 °C ASTM D648 HDT, 1.82 MPa, 3.2mm, unannealed 165 °C ASTM D648 CTE, -40°C to 40°C, flow 6.E·05 1/°C ASTM E831 CTE, -40°C to 40°C, flow 6.E·05 1/°C ASTM E831 Thermal Conductivity @ 25 °C 0.2 W/m.°C ASTM C177 CTE, -40°C to 40°C, flow 6.E·05 1/°C ISO 11359-2	THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed 165 °C ASTM D648 CTE, -40°C to 40°C, flow 6.E·05 1/°C ASTM E831 CTE, -40°C to 40°C, xflow 6.E·05 1/°C ASTM E831 CTE, -40°C to 40°C, tflow 0.2 W/m·°C ASTM C177 CTE, -40°C to 40°C, flow 6.E·05 1/°C ISO 11359-2	Vicat Softening Temp, Rate B/50	183	°C	ASTM D1525
CTE, 40°C to 40°C, flow 6.E-05 1/°C ASTM E831 CTE, 40°C to 40°C, flow 6.E-05 1/°C ASTM E831 Themal Conductivity@25°C 0.2 W/m.°C ASTM C177 CTE, 40°C to 40°C, flow 6.E-05 1/°C ISO 11359-2	HDT, 0.45 MPa, 3.2 mm, unannealed	174	°C	ASTM D648
CTE, -40°C to 40°C, xflow 6.E-05 1/°C ASTM E831 Thermal Conductivity@ 25 °C 0.2 W/m.°C ASTM C177 CTE, -40°C to 40°C, flow 6.E-05 1/°C ISO 11359-2	HDT, 1.82 MPa, 3.2mm, unannealed	165	°C	ASTM D648
Thermal Conductivity @ 25 °C 0.2 W/m.°C ASTM C177 CTE, -40°C to 40°C, flow 6.E-05 1/°C ISO 11359-2	CTE, -40°C to 40°C, flow	6.E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow 6.E-05 1/°C ISO 11359-2	CTE, -40°C to 40°C, xflow	6.E-05	1/°C	ASTM E831
	Thermal Conductivity @ 25 °C	0.2	W/m-°C	ASTM C177
CTE, -40°C to 40°C, xflow 6.E-05 1/°C ISO 11359-2	CTE, -40°C to 40°C, flow	6.E-05	1/°C	ISO 11359-2
	CTE, -40°C to 40°C, xflow	6.E-05	1/°C	ISO 11359-2

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Ball Pressure Test, 125°C +/- 2°C	Pass		IEC 60695-10-2
Ball Pressure Test, 165°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	183	°C	ISO 306
Vicat Softening Temp, Rate B/120	181	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	173	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	162	°C	ISO 75/Af
Metallized Haze Onset	175	°C	SABIC method
Relative Temp Index, Elec ⁽²⁾	150	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽²⁾	130	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽²⁾	150	°C	UL 746B
PHYSICAL ⁽¹⁾			
Specific Gravity	1.2	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm ⁽³⁾	0.6 – 0.95	%	SABIC method
Melt Flow Rate, 330°C/2.16 kgf	25	g/10 min	ASTM D1238
Density	1.21	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	0.5	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.25	%	ISO 62
Melt Volume Rate, MVR at 330°C/2.16kg	24	cm³/10 min	ISO 1133
ELECTRICAL ⁽¹⁾			
Volume Resistivity	>1.E+17	Ω.cm	ASTM D257
Surface Resistivity	>1.E+17	Ω	ASTM D257
Relative Permittivity, 100 Hz	3.12		ASTM D150
Relative Permittivity, 1 MHz	3.02		ASTM D150
Comparative Tracking Index (UL) {PLC}	3	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 3	1.5	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 0	1.5	mm	UL 746A
FLAME CHARACTERISTICS (2)			
UL Yellow Card Link	E121562-100025116		
UL Recognized, 94HB Flame Class Rating	≥1.5	mm	UL 94
Glow Wire Ignitability Temperature, 3.0 mm	875	°C	IEC 60695-2-13
Glow Wire Flammability Index, 3.0 mm	960	°C	IEC 60695-2-12
Glow Wire Flammability Index, 2.0 mm	960	°C	IEC 60695-2-12
Glow Wire Flammability Index, 1.0 mm	960	°C	IEC 60695-2-12
INJECTION MOLDING (4)			
Drying Temperature	135	°C	
Drying Time	4 - 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	300 – 345	°C	
Nozzle Temperature	295 - 340	°C	
Front - Zone 3 Temperature	300 - 345	°C	
Middle - Zone 2 Temperature	290 - 335	°C	
Rear - Zone 1 Temperature	280 – 325	°C	
Mold Temperature	95 – 130	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 - 90	rpm	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Shot to Cylinder Size	40 - 60	%	
Vent Depth	0.025 – 0.08	mm	

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.
- (3) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article. The information stated on Technical Datasheets should
- be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design. (4) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

MORE INFORMATION

For curve data and CAE cards, please visit and register at https://materialfinder.sabic-specialties.com

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