

LEXANTM COPOLYMER XHT2171

REGION AMERICAS

DESCRIPTION

XHT2171 is a 55 MVR high flow, high heat polycarbonate copolymer enabling high aesthetics, thin wall and complex designs. It is available in a range of opaque colors.

TYPICAL PROPERTY VALUES

Revision 20231130

| PROPERTIES TYPICAL VAILUS WITS TEST METHODS MECHANICAL.**** T 3 AM ASTM D638 Tensile Stress, yid. Type I. 50 mm/min 6 Mea ASTM D638 Tensile Stress, yid. Type I. 50 mm/min 7 % ASTM D638 Tensile Strain, birt, Type I. 50 mm/min 30 % ASTM D638 Tensile Strain, birt, Type I. 50 mm/min 20 MPa ASTM D638 Flexural Stress, yiel, 3.0 mm/min 20 MPa ASTM D638 Flexural Stress, yiel, 5.0 mm/min 20 MPa ASTM D790 Tensile Stress, yield, 5.0 mm/min 6 MPa BOS 27 Tensile Stress, yield, 5.0 mm/min 7 % BOS 27 Tensile Stress, yield, 5.0 mm/min 7 % BOS 27 Tensile Strain, break, 50 mm/min 260 MPa BOS 27 Tensile Strain, break, 50 mm/min 107 MPa BOS 27 Tensile Strain, break, 50 mm/min 2450 MPa BOS 27 Tensile Strain, break, 50 mm/min 2450 MPa BOS 27 | | | | |
|---|--|----------------|-------|--------------|
| Tensile Stress, brd, Type I, 50 mm/min 73 MPa ASIM D638 Tensile Stress, brk, Type I, 50 mm/min 7 8 ASIM D638 Tensile Strain, brk, Type I, 50 mm/min 20 8 ASIM D638 Tensile Strain, brk, Type I, 50 mm/min 230 8 ASIM D638 Tensile Strain, brk, Type I, 50 mm/min 240 MPa ASIM D638 Tensile Stress, Yell, 13 mm/min, 50 mm span 2600 MPa ASIM D790 Tensile Stress, Jed, 50 mm/min 2600 MPa ASIM D790 Tensile Stress, Jed, 50 mm/min 7 MPa 150, 527 Tensile Strain, John Tymin 7 S 150, 527 Tensile Strain, Jed, 50 mm/min 7 S 150, 527 Tensile Strain, Jed, 50 mm/min 7 S 150, 527 Tensile Strain, Jed, 50 mm/min 7 WPa 150, 527 Tensile Strain, Jed, 50 mm/min 7 WPa 150, 527 Tensile Strain, Jed, 50 mm/min 7 WPa 150, 527 Tensile Strain, Jed, 50 mm/min 7 150 MPa | PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
| Tensile Stress, brk, Type I, 50 mm/min 60 MFB ASTM DG38 Tensile Strain, Jvk, Type I, 50 mm/min 7 % ASTM DG38 Tensile Modulus, 5 mm/min 2450 MBa ASTM DG38 Flexural Stress, Jvld, 1.3 mm/min, 50 mm span 115 MFB ASTM D790 Flexural Modulus, 1.3 mm/min, 50 mm span 2600 MBa ASTM D790 Tensile Stress, Jveld, 50 mm/min 60 MFB SO 527 Tensile Stress, break, 50 mm/min 7 8 SO 527 Tensile Stress, break, 50 mm/min 7 8 SO 527 Tensile Stress, Jveld, 50 mm/min 7 8 SO 527 Tensile Stress, Jveld, 50 mm/min 7 8 SO 527 Tensile Modulus, 1 mm/min 107 MFB SO 178 Flexural Stress, yleld, 2 mm/min 107 MFB SO 178 Flexural Modulus, 2 mm/min 107 MFB SO 178 Flexural Stress, yleld, 2 mm/min 10 MFB SO 178 Flexural Modulus, 2 mm/min 10 MFB SO 178 | MECHANICAL (1) | | | |
| Tensile Strain, lyft, Type I, 50 mm/min 7 & ASTM D638 Tensile Strain, lyft, Type I, 50 mm/min 300 % ASTM D638 Tensile Strain, lyft, Type I, 50 mm/min 2450 MPa ASTM D638 Tensile Modulus, 5 mm/min 2450 MPa ASTM D790 Elexural Modulus, 1.3 mm/min, 50 mm span 2600 MPa ASTM D790 Tensile Stress, yleld, 50 mm/min 74 MPa ISO 527 Tensile Stress, break, 50 mm/min 7 8 ISO 527 Tensile Strain, break, 50 mm/min 250 % ISO 527 Tensile Modulus, 1 mm/min 2450 MPa ISO 527 Tensile Modulus, 2 mm/min 107 MPa ISO 178 Elexural Modulus, 2 mm/min 2450 MPa ISO 178 Elexural Modulus, 2 mm/min 107 MPa ISO 178 Elexural Modulus, 2 mm/min 108 MPa ISO 178 Elexural Modulus, 2 mm/min 107 MPa ISO 178 Elexural Modulus, 2 mm/min 108 MPa ISO 178 Ele | Tensile Stress, yld, Type I, 50 mm/min | 73 | MPa | ASTM D638 |
| Tensile Strain, brk, Type I, 50 mm/min >30 % ASTM D638 Tensile Modulus, 5 mm/min 2450 MPa ASTM D638 Flexural Modulus, 5 mm/min, 50 mm span 115 MPa ASTM D790 Elexural Modulus, 1 mm/min, 50 mm span 2600 MPa ASTM D790 Tensile Stress, Lyeld, 50 mm/min 74 MPa ISO 527 Tensile Stress, Dreak, 50 mm/min 60 MPa ISO 527 Tensile Stress, Dreak, 50 mm/min 50 % ISO 527 Tensile Stress, Dreak, 50 mm/min 250 % ISO 527 Tensile Stress, pield, 2 mm/min 107 MPa ISO 527 Flexural Modulus, 2 mm/min 107 MPa ISO 178 Flexural Modulus, 2 mm/min 107 MPa ISO 209-1 Ball Indenation Hardness, H388/30 147 MPa ISO 2099-2 MPACT ¹¹ 12 MPa ASTM D4812 Bad Impact, unnotched, 23°C NB J/m ASTM D4812 Bad Impact, unnotched, 30°C NB J/m ASTM D4812 Bad | Tensile Stress, brk, Type I, 50 mm/min | 60 | MPa | ASTM D638 |
| Tensile Modulus, 5 mm/min 2450 MPa ASTM DG38 Flexural Stress, yld, 1.3 mm/min, 50 mm span 115 MPa ASTM D790 Flexural Modulus, 1.3 mm/min, 50 mm span 2600 MPa ASTM D790 Tensile Stress, yled, 50 mm/min 60 MPa SO 527 Tensile Stress, break, 50 mm/min 7 % SO 527 Tensile Strain, break, 50 mm/min 70 % SO 527 Tensile Strain, break, 50 mm/min 70 % SO 527 Tensile Strain, break, 50 mm/min 70 % SO 527 Tensile Strain, break, 50 mm/min 260 MPa SO 178 Tensile Strain, break, 50 mm/min 107 MPa SO 178 Beuvarl Stress, yleid, 2 mm/min 107 MPa SO 178 Beuvarl Stress, yleid, 2 mm/min 107 MPa SO 178 Beural Strain, break, 50 mm/min 107 MPa SO 178 Beural Stress, yleid, 2 mm/min 107 MPa SO 178 Beural Stress, yleid, 2 mm/min 107 MPa SO 1078 | Tensile Strain, yld, Type I, 50 mm/min | 7 | % | ASTM D638 |
| Flexural Stress, yield, 1.3 mm/min, 50 mm span 115 MPa ASTM D790 Flexural Modulus, 1.3 mm/min, 50 mm span 2600 MPa ASTM D790 Tensile Stress, yield, 50 mm/min 74 MPa ISO 527 Tensile Stress, Dead, 50 mm/min 7 % ISO 527 Tensile Stress, Dead, 50 mm/min 750 % ISO 527 Tensile Strain, Jeda, 50 mm/min 250 % ISO 527 Tensile Strain, Jeda, 50 mm/min 2450 MPa ISO 527 Flexural Modulus, 1 mm/min 107 MPa ISO 178 Flexural Modulus, 2 mm/min 107 MPa ISO 178 Ball Indentation Hardness, H358/30 147 MPa ISO 178 Hardness, Rockwell R 125 Y ISO 2039-1 Impact, unnotched, 23°C NB J/m ASTM D4812 Izod Impact, unnotched, 23°C 80 J/m ASTM D4812 Izod Impact, notched, 23°C 80 J/m ASTM D256 Izod Impact, notched, 80°10°3 - 23°C NB J/m² ISO 180/11 | Tensile Strain, brk, Type I, 50 mm/min | >30 | % | ASTM D638 |
| Flexural Modulus, 1.3 mm/min, 50 mm span 2600 MPa ASTM D790 Tensile Stress, yield, 50 mm/min 74 MPa ISO 527 Tensile Stress, break, 50 mm/min 60 MPa ISO 527 Tensile Strain, break, 50 mm/min 7 % ISO 527 Tensile Strain, break, 50 mm/min >50 % ISO 527 Tensile Modulus, 1 mm/min 2450 MPa ISO 178 Flexural Stress, yield, 2 mm/min 107 MPa ISO 178 Flexural Modulus, 2 mm/min 4400 MPa ISO 178 Ball Indenation Inadrness, H358/30 147 MPa ISO 2039-1 Hardness, Rockwell R 25 NB J/m ASTM D4812 Ball Indenation Inadrness, H358/30 NB J/m ASTM D4812 Izod Impact, unnotched, 23°C NB J/m ASTM D4812 Izod Impact, unnotched, 30°C NB J/m ASTM D4812 Izod Impact, unnotched, 30°C NB J/m² SO 180/1U Izod Impact, unnotched 80°10°3 -23°C NB J/m² SO 180/1U | Tensile Modulus, 5 mm/min | 2450 | MPa | ASTM D638 |
| Tensile Stress, yield, 50 mm/min 74 MPa ISO 527 Tensile Stress, break, 50 mm/min 60 MPa 1SO 527 Tensile Strain, yield, 50 mm/min 7 % 1SO 527 Tensile Strain, pield, 50 mm/min 250 % 1SO 527 Tensile Modulus, 1 mm/min 2450 MPa 1SO 527 Flexural Stress, yield, 2 mm/min 107 MPa 1SO 178 Flexural Modulus, 2 mm/min 2400 MPa 1SO 2039-1 Ball Indentation Hardness, 14358/30 147 MPa 1SO 2039-1 Hardness, Rockwell R 125 1 1SO 2039-2 Hardness, Rockwell R 1/m ASTM D4812 1 Bud Impact, unnotched, 23°C NB 1/m ASTM D4812 Izod Impact, unnotched, 30°C 75 1/m ASTM D4512 Izod Impact, unnotched 80°10°3 +23°C NB 1/m ASTM D256 Izod Impact, unnotched 80°10°3 +23°C NB 1/m ASTM D256 Izod Impact, unnotched 80°10°3 +23°C 9 1/m ISO 180/14 Izod | Flexural Stress, yld, 1.3 mm/min, 50 mm span | 115 | MPa | ASTM D790 |
| Tensile Stress, break, 50 mm/min 60 MPa ISO 527 Tensile Strain, yield, 50 mm/min 7 % 150 527 Tensile Strain, break, 50 mm/min >50 % 150 527 Tensile Modulus, 1 mm/min 2450 MPa 150 527 Flexural Modulus, 2 mm/min 107 MPa 150 178 Ball Indentation Hardness, H358/30 147 MPa 150 2039-1 Hardness, Rockwell R 125 W 150 2039-2 Impact Indentation Hardness, H358/30 147 MPa 150 2039-2 Hardness, Rockwell R 125 W 150 2039-2 Impact Indentation Hardness, H358/30 147 MPa ASTM D4812 Ball Indentation Hardness, H358/30 147 MPa ASTM D4812 Bardness, Rockwell R 152 17 ASTM D4812 Bardness, Rockwell R 152 17 ASTM D4812 Bardness, Rockwell R 18 17 ASTM D4812 Bardness, Rockwell R 18 17 ASTM D4812 Bardness, M358/30 18 <td>Flexural Modulus, 1.3 mm/min, 50 mm span</td> <td>2600</td> <td>MPa</td> <td>ASTM D790</td> | Flexural Modulus, 1.3 mm/min, 50 mm span | 2600 | MPa | ASTM D790 |
| Tensile Strain, yield, 50 mm/min 7 % ISO 527 Tensile Strain, break, 50 mm/min >50 % ISO 527 Tensile Modulus, 1 mm/min 2450 MPa ISO 527 Flexural Stress, yield, 2 mm/min 107 MPa ISO 178 Flexural Modulus, 2 mm/min 2400 MPa ISO 2039-1 Ball Indentation Hardness, H358/30 147 % ISO 2039-1 Hardness, Rockwell R 155 % ISO 2039-1 Hardness, Rockwell R 25 % ISO 2039-2 IMPACT (1) ** Ym ASTM D4812 Izod Impact, unnotched, 23°C NB J/m ASTM D4812 Izod Impact, notched, 30°C NB J/m ASTM D4812 Izod Impact, unnotched, 80°10°3-123°C 75 J/m ASTM D256 Izod Impact, unnotched, 80°10°3-23°C NB J/m² ISO 180/10 Izod Impact, unnotched, 80°10°3-23°C 9 J/m² ISO 180/10 Izod Impact, unnotched, 80°10°3-29°C 9 J/m² ISO 180/10 Izod Impact, unnot | Tensile Stress, yield, 50 mm/min | 74 | MPa | ISO 527 |
| Tensile Strain, break, 50 mm/min >50 % SO 527 Tensile Modulus, 1 mm/min 2450 MPa ISO 527 Flexural Stress, yield, 2 mm/min 107 MPa ISO 178 Flexural Modulus, 2 mm/min 2400 MPa ISO 178 Ball Indentation Hardness, H358/30 147 MPa ISO 2039-1 Hardness, Rockwell R 125 - ISO 2039-2 Impact, 10 NB J/m ASTM D4812 Izod Impact, unnotched, 23°C NB J/m ASTM D4812 Izod Impact, notched, 23°C 88 J/m ASTM D4812 Izod Impact, notched, 23°C NB J/m ASTM D4812 Izod Impact, notched, 23°C NB J/m ASTM D256 Izod Impact, notched 80°10°3 +23°C NB J/m² ASTM D256 Izod Impact, notched 80°10°3 +23°C NB J/m² SO 180/14 Izod Impact, notched 80°10°3 +23°C 9 J/m² SO 180/14 Izod Impact, notched 80°10°3 +23°C 9 J/m² SO 180/14 Izod Impact, notched 80 | Tensile Stress, break, 50 mm/min | 60 | MPa | ISO 527 |
| Fensile Modulus, 1 mm/min 2450 MPa ISO 527 Flexural Stress, yield, 2 mm/min 107 MPa ISO 178 Flexural Modulus, 2 mm/min 2400 MPa ISO 1078 Ball Indentation Hardness, H358/30 147 MPa ISO 2039-1 Hardness, Rockwell R 125 V ISO 2039-2 IMPACT (*)** V V V Izod Impact, unnotched, 23°C NB J/m ASTM D4812 Izod Impact, notched, 23°C 80 J/m ASTM D4812 Izod Impact, notched, 23°C 80 J/m ASTM D4812 Izod Impact, notched, 23°C 80 J/m ASTM D256 Izod Impact, notched, 23°C NB I/m ASTM D256 Izod Impact, notched, 80°10°3 +23°C NB I/m² ISO 180/10 Izod Impact, notched 80°10°3 +23°C NB I/m² ISO 180/10 Izod Impact, notched 80°10°3 +23°C 9 I/m² ISO 180/10 Izod Impact, notched 80°10°3 +23°C 9 I/m² ISO 180/10 Izod Impact, notched 80°10°3 | Tensile Strain, yield, 50 mm/min | 7 | % | ISO 527 |
| Flexural Stress, yield, 2 mm/min 107 MPa ISO 178 Flexural Modulus, 2 mm/min 2400 MPa ISO 178 Ball Indentation Hardness, H358/30 147 MPa ISO 2039-1 Hardness, Rockwell R 125 - ISO 2039-2 IMPACT ⁽¹⁾ V V ISO 2039-2 IMPACT ⁽¹⁾ V V ISO 2039-2 IMPACT (1) V ISO 2039-2 ISO 2039-2 IMPACT (1) V ISO 180/1 ISO 180/1 Izod Impact, unnotched, 23°C NB I/m ASTM D256 Izod Impact, unnotched 80°10°3 +23°C NB I/m IX/m² ISO 180/10 Izod Impact, unnotched 80°10°3 +23°C NB IX/m² ISO 180/10 ISO 180/10 Izod Impact, outched 80°10°3 sp=62mm 10 IX/m² | Tensile Strain, break, 50 mm/min | >50 | % | ISO 527 |
| Flexural Modulus, 2 mm/min 2400 MPa ISO 178 Ball Indentation Hardness, H358/30 147 MPa ISO 2039-1 Hardness, Rockwell R 125 - ISO 2039-2 IMPACT (**) ************************************ | Tensile Modulus, 1 mm/min | 2450 | MPa | ISO 527 |
| Ball Indentation Hardness, H358/30 147 MPa ISO 2039-1 Hardness, Rockwell R 125 - ISO 2039-2 IMPACT (1) V V ISO 2039-2 Izod Impact, unnotched, 23°C NB J/m ASTM D4812 Izod Impact, unnotched, 23°C NB J/m ASTM D256 Izod Impact, notched, 30°C 75 J/m ASTM D256 Izod Impact, unnotched 80°10°3 +23°C NB kl/m² ISO 180/1U Izod Impact, unnotched 80°10°3 +23°C NB kl/m² ISO 180/1U Izod Impact, notched 80°10°3 -23°C NB kl/m² ISO 180/1U Izod Impact, notched 80°10°3 -23°C 9 kl/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 9 kl/m² ISO 180/1A Izod Impact, notched 80°10°3 sp=62mm 10 kl/m² ISO 179/1eA Izod Impact, notched 80°10°3 sp=62mm 10 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 | Flexural Stress, yield, 2 mm/min | 107 | MPa | ISO 178 |
| Hardness, Rockwell R 125 | Flexural Modulus, 2 mm/min | 2400 | MPa | ISO 178 |
| IMPACT (1) Izod Impact, unnotched, 23°C NB J/m ASTM D4812 Izod Impact, unnotched, -30°C NB J/m ASTM D4812 Izod Impact, unnotched, -30°C 80 J/m ASTM D256 Izod Impact, notched, -30°C 75 J/m ASTM D256 Izod Impact, unnotched 80°10°3 +23°C NB kl/m² ISO 180/10 Izod Impact, unnotched 80°10°3 -30°C NB kl/m² ISO 180/10 Izod Impact, untotched 80°10°3 -30°C NB kl/m² ISO 180/10 Izod Impact, notched 80°10°3 -30°C 9 kl/m² ISO 180/10 Izod Impact, notched 80°10°3 -30°C 9 kl/m² ISO 180/10 Izod Impact, notched 80°10°3 -30°C 9 kl/m² ISO 180/10 Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm 10 kl/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80°10°3 sp=62mm NB kl/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kl/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kl/m² ASTM D1525 | Ball Indentation Hardness, H358/30 | 147 | MPa | ISO 2039-1 |
| Izod Impact, unnotched, 23°C NB J/m ASTM D4812 Izod Impact, unnotched, 30°C NB J/m ASTM D4812 Izod Impact, notched, 23°C 80 J/m ASTM D256 Izod Impact, unnotched 80°10°3 +23°C NB kJ/m² ISO 180/1U Izod Impact, unnotched 80°10°3 -30°C NB kJ/m² ISO 180/1U Izod Impact, notched 80°10°3 -30°C 9 kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 9 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm 10 kJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB KJ/m² ISO 179/1eU | Hardness, Rockwell R | 125 | - | ISO 2039-2 |
| Izod Impact, unnotched, 30°C NB J/m ASTM D4812 Izod Impact, notched, 23°C 80 J/m ASTM D256 Izod Impact, notched, 30°C 75 J/m ASTM D256 Izod Impact, unnotched 80°10°3 -23°C NB kJ/m² ISO 180/10 Izod Impact, unnotched 80°10°3 -30°C NB kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 9 kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 9 kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 9 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm 10 kJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm 164 °C ASTM D1525 <t< td=""><td>IMPACT (1)</td><td></td><td></td><td></td></t<> | IMPACT (1) | | | |
| Izod Impact, notched, 23°C 80 J/m ASTM D256 Izod Impact, notched, -30°C 75 J/m ASTM D256 Izod Impact, unnotched 80°10°3 +23°C NB KJ/m² ISO 180/1U Izod Impact, unnotched 80°10°3 -30°C NB KJ/m² ISO 180/1A Izod Impact, notched 80°10°3 +23°C 9 KJ/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 9 KJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm 10 KJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80°10°3 sp=62mm NB KJ/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB KJ/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB KJ/m² SO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB KJ/m² SO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB KJ/m² ASTM D1525 | Izod Impact, unnotched, 23°C | NB | J/m | ASTM D4812 |
| Izod Impact, notched, -30°C 75 J/m ASTM D256 Izod Impact, unnotched 80*10'3 +23°C NB kJ/m² ISO 180/1U Izod Impact, unnotched 80*10'3 -30°C NB kJ/m² ISO 180/1A Izod Impact, notched 80*10'3 +23°C 9 kJ/m² ISO 180/1A Izod Impact, notched 80*10'3 -30°C 9 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80*10'3 sp=62mm 10 kJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80*10'3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10'3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10'3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (¹) Vicat Softening Temp, Rate B/50 164 °C ASTM D1525 Vicat Softening Temp, Rate B/120 165 °C ASTM D1525 HDT, 0.45 MPa, 3.2 mm, unannealed 160 °C ASTM D648 | Izod Impact, unnotched, -30°C | NB | J/m | ASTM D4812 |
| Izod Impact, unnotched 80°10°3 +23°C NB kJ/m² ISO 180/1U Izod Impact, unnotched 80°10°3 -30°C NB kJ/m² ISO 180/1U Izod Impact, notched 80°10°3 +23°C 9 kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 9 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm 10 kJ/m² ISO 179/1eA Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (¹) Vicat Softening Temp, Rate B/50 164 °C ASTM D1525 Vicat Softening Temp, Rate B/120 165 °C ASTM D1525 HDT, 0.45 MPa, 3.2 mm, unannealed 160 °C ASTM D648 | Izod Impact, notched, 23°C | 80 | J/m | ASTM D256 |
| Izod Impact, unnotched 80*10*3 -30°C NB KJ/m² ISO 180/1U Izod Impact, notched 80*10*3 +23°C 9 KJ/m² ISO 180/1A Izod Impact, notched 80*10*3 -30°C 9 KJ/m² ISO 180/1A Izod Impact, notched 80*10*3 sp=62mm 10 KJ/m² ISO 179/1eA Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm 10 KJ/m² ISO 179/1eA Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB KJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm ISO 179/1eU ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm ISO 179/1eU ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm ISO 179/1eU ISO 179/1eU | Izod Impact, notched, -30°C | 75 | J/m | ASTM D256 |
| Izod Impact, notched 80*10*3 +23°C 9 kJ/m² ISO 180/1A Izod Impact, notched 80*10*3 -30°C 9 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm 10 kJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (1) Vicat Softening Temp, Rate B/50 164 °C ASTM D1525 Vicat Softening Temp, Rate B/120 165 °C ASTM D1525 HDT, 0.45 MPa, 3.2 mm, unannealed 160 °C ASTM D648 | Izod Impact, unnotched 80*10*3 +23°C | NB | kJ/m² | ISO 180/1U |
| Izod Impact, notched 80*10*3 -30°C 9 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm 10 kJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm 10 kJ/m² ISO 179/1eA Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (1) Vicat Softening Temp, Rate B/50 164 °C ASTM D1525 Vicat Softening Temp, Rate B/120 165 °C ASTM D1525 HDT, 0.45 MPa, 3.2 mm, unannealed 160 °C ASTM D648 | Izod Impact, unnotched 80*10*3 -30°C | NB | kJ/m² | ISO 180/1U |
| Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm 10 kJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm 10 kJ/m² ISO 179/1eA Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (¹¹) Vicat Softening Temp, Rate B/50 164 °C ASTM D1525 Vicat Softening Temp, Rate B/120 165 °C ASTM D1525 HDT, 0.45 MPa, 3.2 mm, unannealed 160 °C ASTM D648 | Izod Impact, notched 80*10*3 +23°C | 9 | kJ/m² | ISO 180/1A |
| Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm 10 kJ/m² ISO 179/1eA Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (¹¹) Vicat Softening Temp, Rate B/50 164 °C ASTM D1525 Vicat Softening Temp, Rate B/120 165 °C ASTM D1525 HDT, 0.45 MPa, 3.2 mm, unannealed 160 °C ASTM D648 | Izod Impact, notched 80*10*3 -30°C | 9 | kJ/m² | ISO 180/1A |
| Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (¹) Vicat Softening Temp, Rate B/50 164 °C ASTM D1525 Vicat Softening Temp, Rate B/120 165 °C ASTM D1525 HDT, 0.45 MPa, 3.2 mm, unannealed 160 °C ASTM D648 | Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm | 10 | kJ/m² | ISO 179/1eA |
| Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (1) Vicat Softening Temp, Rate B/50 164 °C ASTM D1525 Vicat Softening Temp, Rate B/120 165 °C ASTM D1525 HDT, 0.45 MPa, 3.2 mm, unannealed 160 °C ASTM D648 | Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm | 10 | kJ/m² | ISO 179/1eA |
| THERMAL (1) Vicat Softening Temp, Rate B/50 164 °C ASTM D1525 Vicat Softening Temp, Rate B/120 165 °C ASTM D1525 HDT, 0.45 MPa, 3.2 mm, unannealed 160 °C ASTM D648 | Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm | NB | kJ/m² | ISO 179/1eU |
| Vicat Softening Temp, Rate B/50 164 °C ASTM D1525 Vicat Softening Temp, Rate B/120 165 °C ASTM D1525 HDT, 0.45 MPa, 3.2 mm, unannealed 160 °C ASTM D648 | Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm | NB | kJ/m² | ISO 179/1eU |
| Vicat Softening Temp, Rate B/120 165 °C ASTM D1525 HDT, 0.45 MPa, 3.2 mm, unannealed °C ASTM D648 | THERMAL (1) | | | |
| HDT, 0.45 MPa, 3.2 mm, unannealed 160 °C ASTM D648 | Vicat Softening Temp, Rate B/50 | 164 | °C | ASTM D1525 |
| | Vicat Softening Temp, Rate B/120 | 165 | °C | ASTM D1525 |
| HDT, 1.82 MPa, 3.2mm, unannealed 147 °C ASTM D648 | HDT, 0.45 MPa, 3.2 mm, unannealed | 160 | °C | ASTM D648 |
| | HDT, 1.82 MPa, 3.2mm, unannealed | 147 | °C | ASTM D648 |



| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|----------------|------------|----------------|
| 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 |
| 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, xflow | 6.E-05 | 1/°C | ISO 11359-2 |
| Ball Pressure Test, 125°C +/- 2°C | PASSES | - | IEC 60695-10-2 |
| Vicat Softening Temp, Rate B/50 | 165 | °C | ISO 306 |
| Vicat Softening Temp, Rate B/120 | 167 | °C | ISO 306 |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm | 159 | °C | ISO 75/Bf |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 146 | °C | ISO 75/Af |
| Metallized Haze pass at 1.5mm | 155 | °C | SABIC method |
| PHYSICAL (1) | | | |
| Specific Gravity | 1.2 | - | ASTM D792 |
| Mold Shrinkage, flow, 3.2 mm (2) | 0.6 - 0.9 | % | SABIC method |
| Melt Flow Rate, 300°C/2.16 kgf | 22 | g/10 min | ASTM D1238 |
| Melt Flow Rate, 330°C/2.16 kgf | 60 | g/10 min | ASTM D1238 |
| Density | 1.2 | g/cm³ | ISO 1183 |
| Water Absorption, (23°C/saturated) | 0.3 | % | ISO 62-1 |
| Moisture Absorption (23°C / 50% RH) | 0.3 | % | ISO 62 |
| Melt Volume Rate, MVR at 300°C/2.16 kg | 19 | cm³/10 min | ISO 1133 |
| Melt Volume Rate, MVR at 330°C/2.16kg | 55 | cm³/10 min | ISO 1133 |
| INJECTION MOLDING (3) | | | |
| Drying Temperature | 130 | °C | |
| Drying Time | 4 – 6 | Hrs | |
| Maximum Moisture Content | 0.02 | % | |
| Melt Temperature | 290 – 350 | °C | |
| Nozzle Temperature | 285 – 345 | °C | |
| Front - Zone 3 Temperature | 290 – 350 | °C | |
| Middle - Zone 2 Temperature | 280 – 340 | °C | |
| Rear - Zone 1 Temperature | 270 – 330 | °C | |
| Mold Temperature | 85 – 130 | °C | |
| Back Pressure | 0.3 - 0.7 | MPa | |
| Screw Speed | 40 – 90 | rpm | |
| 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.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

⁽²⁾ 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.

⁽³⁾ 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

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