Kynar® resins are fluorinated thermoplastic homopolymers.

Outstanding characteristics: chemical resistance, imperviousness to UV, high barrier properties, high purity, good mechanical and thermo-mechanical properties.

Main applications: corrosion protection in the chemical industry, coating (painting, co-extrusion), off-shore, wire and cable, PPA, battery, membrane.

### MAIN CHARACTERISTICS

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>VALUE</th>
<th>UNIT</th>
<th>TEST STANDARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melt Volume-Flow Rate, MVR</td>
<td>0.9</td>
<td>cm³/10min</td>
<td>ISO 1133</td>
</tr>
<tr>
<td>Temperature</td>
<td>230</td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Load</td>
<td>10</td>
<td>kg</td>
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</tr>
<tr>
<td>Melt Flow Rate</td>
<td>0.5 - 3.5</td>
<td>g/10min</td>
<td>ASTM D1238</td>
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<tr>
<td>Temperature</td>
<td>230</td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Load</td>
<td>12.5</td>
<td>kg</td>
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</tr>
<tr>
<td>Molding Shrinkage, parallel</td>
<td>3.0</td>
<td>%</td>
<td>ISO 294.4, 2577</td>
</tr>
<tr>
<td>Molding Shrinkage, normal</td>
<td>3.0</td>
<td>%</td>
<td>ISO 294.4, 2577</td>
</tr>
<tr>
<td>Melt Viscosity, 230°C, 100 s⁻¹</td>
<td>30.5 - 36.5</td>
<td>kPoise</td>
<td>ASTM D3835</td>
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<tr>
<td>Tensile Modulus</td>
<td>2000</td>
<td>MPa</td>
<td>ISO 527-1/-2</td>
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<tr>
<td>Tensile Modulus, 73 °F</td>
<td>1380 - 2310</td>
<td>MPa</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Yield stress</td>
<td>50</td>
<td>MPa</td>
<td>ISO 527-1/-2</td>
</tr>
<tr>
<td>Tensile Strength at Yield, 73 °F</td>
<td>44.8 - 55.2</td>
<td>MPa</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Yield strain</td>
<td>9</td>
<td>%</td>
<td>ISO 527-1/-2</td>
</tr>
<tr>
<td>Elongation at Yield, 73 °F</td>
<td>5 - 10</td>
<td>%</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Nominal Strain at Break</td>
<td>&gt;50</td>
<td>%</td>
<td>ISO 527-1/-2</td>
</tr>
<tr>
<td>Tensile Strength at Break, 73 °F</td>
<td>34.5 - 55.2</td>
<td>MPa</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Elongation at Break, 73 °F</td>
<td>20 - 100</td>
<td>%</td>
<td>ASTM D638</td>
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<tr>
<td>Taber Abrasion, CS 17 1000g:pad</td>
<td>5 - 9</td>
<td>mg/1000 cycles</td>
<td>ASTM G195-13A</td>
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<tr>
<td>Hardness, Shore D, 73 °F</td>
<td>76 - 80</td>
<td>-</td>
<td>ASTM D2240</td>
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<tr>
<td>Flexural Modulus, 73 °F</td>
<td>1380 - 2310</td>
<td>MPa</td>
<td>ASTM D790</td>
</tr>
<tr>
<td>Flexural Strength @ 5% Strain, 73 °F</td>
<td>58.6 - 75.8</td>
<td>MPa</td>
<td>ASTM D790</td>
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<tr>
<td>Compressive Strength, 73 °F</td>
<td>68.9 - 103</td>
<td>MPa</td>
<td>ASTM D695</td>
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<tr>
<td>Charpy Impact Strength, +23°C</td>
<td>50</td>
<td>kJ/m²</td>
<td>ISO 179/1eU</td>
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<tr>
<td>Unnotched Impact Strength, 73 °F</td>
<td>1.07 - 4.27</td>
<td>kJ/m</td>
<td>ASTM D256</td>
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<tr>
<td>Notched Impact Strength, 73 °F</td>
<td>0.0961 - 0.214</td>
<td>kJ/m</td>
<td>ASTM D256</td>
</tr>
<tr>
<td>Coefficient of Friction, Static vs. Steel, 73 °F</td>
<td>0.2</td>
<td>-</td>
<td>ASTM D1894</td>
</tr>
<tr>
<td>Coefficient of Friction, Dynamic vs. Steel, 73 °F</td>
<td>0.14</td>
<td>-</td>
<td>ASTM D1894</td>
</tr>
<tr>
<td>Melting Temperature, 10°C/min</td>
<td>170</td>
<td>°C</td>
<td>ISO 11357-1/-3</td>
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<tr>
<td>Melting Point, 73 °F</td>
<td>165 - 172</td>
<td>°C</td>
<td>ASTM 03418</td>
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<tr>
<td>Property</td>
<td>Value</td>
<td>Unit</td>
<td>Reference</td>
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<td>----------------------------------------------</td>
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<tr>
<td>Glass Transition Temperature, 10°C/min</td>
<td>-40°C</td>
<td>°C</td>
<td>ISO 11357-1/-2</td>
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<tr>
<td>Glass Transition Temperature (Tg)</td>
<td>-40.6°C to -38.3°C</td>
<td>°C</td>
<td>ASTM D7028</td>
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<tr>
<td>Temp. of Deflection Under Load, 1.80 MPa</td>
<td>104°C</td>
<td>°C</td>
<td>ISO 75-1/-2</td>
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<tr>
<td>Heat Deflection Temperature, 264 Psi, 248°F/hr</td>
<td>105°C to 115°C</td>
<td>°C</td>
<td>ASTM D648</td>
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<tr>
<td>Heat Deflection Temperature, 66 Psi, 248°F/hr</td>
<td>125°C to 140°C</td>
<td>°C</td>
<td>ASTM D648</td>
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<tr>
<td>Coef. of Linear Thermal Expansion, parallel</td>
<td>150 E-6/K</td>
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<td>ISO 11359-1/-2</td>
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<tr>
<td>Coefficient of Thermal Expansion, 73°F</td>
<td>11.9°C to 14.4°C</td>
<td>°C</td>
<td>ASTM D696</td>
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<tr>
<td>Burning Behav. at 1.5 mm Nominal Thickness</td>
<td>V-0 class</td>
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<td>IEC 60695-11-10</td>
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<tr>
<td>Yellow Card available</td>
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<tr>
<td>Burning Behav. at Thickness h</td>
<td>V-0 class</td>
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<td>IEC 60695-11-10</td>
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<tr>
<td>Thickness Tested</td>
<td>0.8 mm</td>
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<tr>
<td>Oxygen Index</td>
<td>43%</td>
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<td>ISO 4589-1/-2</td>
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<tr>
<td>Limiting Oxygen Index, 73°F</td>
<td>44%</td>
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<td>ASTM D2663</td>
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<tr>
<td>Thermal Conductivity</td>
<td>0.17 - 0.19 W/(m K)</td>
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<td>ASTM D433</td>
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<tr>
<td>Specific Heat</td>
<td>745 - 958 J/(kg K)</td>
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<td>DSC</td>
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<tr>
<td>Thermal Decomposition TGA, in air</td>
<td>375°C</td>
<td>°C</td>
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<td>1% wt. loss</td>
<td>410°C</td>
<td>°C</td>
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<tr>
<td>Thermal Decomposition TGA, in nitrogen</td>
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<td>Dielectric Constant, 1 kHz</td>
<td>4.5 - 9.5</td>
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<td>ASTM D150</td>
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<tr>
<td>Dissipation Factor, 100 kHz</td>
<td>0.01 - 0.21 Ohm*cm</td>
<td>Ohm*cm</td>
<td>ASTM D257</td>
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<tr>
<td>Volume Resistivity, DC 68°F, 65% R.H.</td>
<td>2E14</td>
<td>Ohm*cm</td>
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<tr>
<td>Water Absorption</td>
<td>0.01 - 0.03%</td>
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<td>ASTM D570</td>
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<tr>
<td>Specific Gravity, 73°F</td>
<td>1.77 - 1.79 kg/m³</td>
<td>kg/m³</td>
<td>ASTM D792</td>
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<tr>
<td>Refractive Index @ sodium D line</td>
<td>1.42</td>
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<td>ASTM D542</td>
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<tr>
<td>Density of melt</td>
<td>1780</td>
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<tr>
<td>Thermal conductivity of melt</td>
<td>0.19</td>
<td>W/(m K)</td>
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</tbody>
</table>

**Processing**

*Other Extrusion*

**Delivery form**

*Powder*