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.

### 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>1.3</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>
<td></td>
</tr>
<tr>
<td>Melt Flow Rate</td>
<td>2 - 6</td>
<td>g/10min</td>
<td>ASTM D1238</td>
</tr>
<tr>
<td>Temperature</td>
<td>230</td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Load</td>
<td>12.5</td>
<td>kg</td>
<td></td>
</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>23 - 29</td>
<td>kPoise</td>
<td>ASTM D3835</td>
</tr>
<tr>
<td>Tensile Modulus</td>
<td>2000</td>
<td>MPa</td>
<td>ISO 527-1/-2</td>
</tr>
<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>
</tr>
<tr>
<td>Taber Abrasion, CS 17 1000g/pad</td>
<td>5 - 9</td>
<td>mg/1000 cycles</td>
<td>ASTM-G195-13A</td>
</tr>
<tr>
<td>Hardness, Shore D, 73 °F</td>
<td>76 - 80</td>
<td>-</td>
<td>ASTM D2240</td>
</tr>
<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>
</tr>
<tr>
<td>Compressive Strength, 73 °F</td>
<td>68.9 - 103</td>
<td>MPa</td>
<td>ASTM D695</td>
</tr>
<tr>
<td>Charpy Notched Impact Strength, +23°C</td>
<td>50</td>
<td>kJ/m²</td>
<td>ISO 179/1aA</td>
</tr>
<tr>
<td>Unnotched Impact Strength, 73 °F</td>
<td>1.07 - 4.27</td>
<td>kJ/m</td>
<td>ASTM D256</td>
</tr>
<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>
</tr>
<tr>
<td>Melting Point, 73 °F</td>
<td>165 - 172</td>
<td>°C</td>
<td>ASTM D3418</td>
</tr>
</tbody>
</table>

### Glass Transition Temperature (Tg)
-40 °C

#### Temperature Rating
-10 °C

#### Temp. of deflection under load, 1.80 MPa
104 °C

#### Heat Deflection Temperature, 248 °F/hr
105 - 115 °C

#### Heat Deflection Temperature, 66 Psi, 248 °F/hr
125 - 140 °C

#### Coeff. of linear therm. expansion, parallel
150 E-6/K

#### Coefficient of Thermal Expansion, 73 °F
11.9 - 14.4 10E-5/°C

#### Burning Behav. at 1.5 mm nom. thickn.
V-0 class

#### Yellow Card available
yes

#### Burning Behav. at thickness h

<table>
<thead>
<tr>
<th>Thickness tested</th>
<th>Class</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8 mm</td>
<td>V-0</td>
<td>IEC 60695-11-10</td>
</tr>
</tbody>
</table>

#### Oxygen index
43 %

#### Limiting Oxygen Index, 73 °F
44 %

#### Thermal Conductivity
0.17 - 0.19 W/(m K)

#### Specific Heat
745 - 958 J/(kg K)

#### Thermal Decomposition TGA, in air
375 °C

#### Thermal Decomposition TGA, in nitrogen
410 °C

#### Relative Thermal Index, Mechanical
150 °C

#### Relative Thermal Index, Electrical
150 °C

#### Dielectric Constant, 1 kHz
4.5 - 9.5 -

#### Dissipation Factor, 100 kHz
0.01 - 0.21 -

#### Volume Resistivity, DC 68 °F, 65% R.H.
2E14 Ohm*cm

#### Water absorption
0.02 %

#### Water Absorption
0.01 - 0.03 %

#### Specific Gravity, 73 °F
1.77 - 1.79 -

#### Refractive Index @ sodium D line
1.42 -

#### Density of melt
1780 kg/m³

#### Thermal conductivity of melt
0.19 W/(m K)

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### Processing

**Other Extrusion**

**Chemical Media Resistance**

### Acids
- ✔ Acetic Acid (5% by mass) (23°C)

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**KYNAR**® 761

- Citric Acid solution (10% by mass) (23°C)
- Lactic Acid (10% by mass) (23°C)
- Hydrochloric Acid (36% by mass) (23°C)
- Nitric Acid (40% by mass) (23°C)
- Sulfuric Acid (38% by mass) (23°C)
- Sulfuric Acid (5% by mass) (23°C)
- Chromic Acid solution (40% by mass) (23°C)

**Bases**
- Sodium Hydroxide solution (35% by mass) (23°C)
- Sodium Hydroxide solution (1% by mass) (23°C)
- Ammonium Hydroxide solution (10% by mass) (23°C)

**Alcohols**
- Isopropyl alcohol (23°C)
- Methanol (23°C)
- Ethanol (23°C)

**Hydrocarbons**
- n-Hexane (23°C)
- Toluene (23°C)
- iso-Octane (23°C)

**Ketones**
- Acetone (23°C)

**Ethers**
- Diethyl ether (23°C)

**Mineral oils**
- SAE 10W40 multigrade motor oil (23°C)
- SAE 10W40 multigrade motor oil (130°C)
- SAE 80/90 hypoid-gear oil (130°C)
- Insulating Oil (23°C)

Standard Fuels

- ISO 1817 Liquid 1 (60°C)
- ISO 1817 Liquid 2 (60°C)
- ISO 1817 Liquid 3 (60°C)
- ISO 1817 Liquid 4 (60°C)
- Standard fuel without alcohol (pref. ISO 1817 Liquid C) (23°C)
- Standard fuel with alcohol (pref. ISO 1817 Liquid 4) (23°C)
- Diesel fuel (pref. ISO 1817 Liquid F) (23°C)
- Diesel fuel (pref. ISO 1817 Liquid F) (90°C)
- Diesel fuel (pref. ISO 1817 Liquid F) (>90°C)

Salt solutions

- Sodium Chloride solution (10% by mass) (23°C)
- Sodium Hypochlorite solution (10% by mass) (23°C)
- Sodium Carbonate solution (20% by mass) (23°C)
- Sodium Carbonate solution (2% by mass) (23°C)
- Zinc Chloride solution (50% by mass) (23°C)

Other

- Ethyl Acetate (23°C)
- Hydrogen peroxide (23°C)
- Ethylene Glycol (50% by mass) in water (108°C)
- Water (23°C)
- Deionized water (90°C)
- Phenol solution (5% by mass) (23°C)