Kynar® MG15

PVDF

Kynar® MG15 resin

Kynar® resins are fluorinated thermoplastic homopolymers.

Kynar® MG15 resin is a crystalline high viscosity polymer of polyvinylidene difluoride. It is an engineering polymer with an outstanding balance of physical strength and high chemical resistance which make it ideal for micro and ultrafiltration membranes for durable water purification and other applications.

Kynar® MG15 resin is soluble in selected solvents and can be used in solution processing applications. It is especially recommended for hollow fiber and flat sheet membranes.

Kynar® MG15 resin has NSF, FDA, and USP Class VI certifications for use in potable water, food processing, and biopharma applications.

<table>
<thead>
<tr>
<th>Thermal properties</th>
<th>Value</th>
<th>Unit</th>
<th>Test Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting temperature, 10°C/min</td>
<td>334</td>
<td>°F</td>
<td>ISO 11357-1/-3</td>
</tr>
<tr>
<td>Glass transition temperature, 10°C/min</td>
<td>-40</td>
<td>°F</td>
<td>ISO 11357-1/-2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other properties</th>
<th>Value</th>
<th>Unit</th>
<th>Test Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>1.78</td>
<td>g/cm³</td>
<td>ISO 1183</td>
</tr>
</tbody>
</table>

Characteristics

Processing
Casting

Delivery form
Powder

Chemical Media Resistance

Acids

✔ Acetic Acid (5% by mass) (23°C)
✔ 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)
Kynar® MG15
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- 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)