# Arkema Group Kynar Super Flex® 2500 PVDF Copolymer (discontinued **)

**Category :** Polymer , Thermoplastic , Fluoropolymer , PVDF , Polyvinylidinefluoride (PVDF), Molded/Extruded

**Material Notes:**

Copolymer Series, Kynar® components are used extensively in the high purity semiconductor market, the pulp and paper industry, nuclear waste processing, and the general chemical processing industryInformation provided by Arkema Group

Order this product through the following link:
http://www.lookpolymers.com/polymer_Arkema-Group-Kynar-Super-Flex-2500-PVDF-Copolymer-nbspdiscontinued-.php

| Physical Properties | Metric | English | Comments |
|---|---|---|---|
| Specific Gravity | 1.80 - 1.82 g/cc | 1.80 - 1.82 g/cc | ASTM D792 |
| Water Absorption | 0.040 - 0.070 % | 0.040 - 0.070 % | 24 hr / 20°C; ASTM D570 |
| Viscosity | 8.00e+6 cP<br>@Shear Rate 100 1/s, Temperature 232 °C | 8.00e+6 cP<br>@Shear Rate 100 1/s, Temperature 450 °F | ASTM D3835 |
| Ash | 0.00 - 5.0 % | 0.00 - 5.0 % | Thermal Decomposition/ in air |

| Mechanical Properties | Metric | English | Comments |
|---|---|---|---|
| Hardness, Shore D | 55 - 60 | 55 - 60 | ASTM D2240 |
| Tensile Strength, Ultimate | 27.6 - 41.4 MPa | 4000 - 6000 psi | ASTM D638 |
| Tensile Strength, Yield | 11.7 - 19.3 MPa | 1700 - 2800 psi | ASTM D638 |
| Elongation at Break | 500 - 800 % | 500 - 800 % | ASTM D638 |
| Elongation at Yield | 12 - 25 % | 12 - 25 % | ASTM D638 |
| Tensile Modulus | 0.241 - 0.379 GPa | 35.0 - 55.0 ksi | ASTM D638 |
| Flexural Strength | 10.3 - 17.2 MPa | 1500 - 2500 psi | @ 5% strain; ASTM D790 |
| Flexural Modulus | 0.193 - 0.248 GPa | 28.0 - 36.0 ksi | ASTM D790 |
| Compressive Strength | 13.8 - 20.7 MPa | 2000 - 3000 psi | ASTM D695 |
| Izod Impact, Notched | NB | NB | ASTM D256 |
| Izod Impact, Unnotched | NB | NB | ASTM D256 |
| Coefficient of Friction, Dynamic | 0.54 | 0.54 | vs. Steel; ASTM D1894 |
| Coefficient of Friction, Static | 0.49 | 0.49 | vs. Steel; ASTM D1894 |
| Taber Abrasion, mg/1000 Cycles | 28 - 33 | 28 - 33 | CS-17 1000g:load |

| Thermal Properties | Metric | English | Comments |
|---|---|---|---|
| CTE, linear | 153 - 194 µm/m-°C<br>@Temperature 20.0 °C | 85.0 - 108 µin/in-°F<br>@Temperature 68.0 °F | ASTM D696 |
| Specific Heat Capacity | 1.17 - 1.51 J/g-°C | 0.280 - 0.360 BTU/lb-°F | DSC |
| Thermal Conductivity | 0.144 - 0.180 W/m-K | 1.00 - 1.25 BTU-in/hr-ft²-°F | ASTM D433 |
| Melting Point | 116 - 121 °C | 240 - 250 °F | ASTM D3418 |
| Deflection Temperature at 1.8 MPa (264 psi) | 26.7 - 37.8 °C | 80.0 - 100 °F | ASTM D648 |
| Glass Transition Temp, Tg | -46.0 - -40.0 °C | -50.8 - -40.0 °F | (DMA) @ 1 Hz |
| Decomposition Temperature | 375 °C | 707 °F | 1% wt. loss / in air |
| | 410 °C | 770 °F | 1% wt. loss / in nitrogen |
| Oxygen Index | 42 % | 42 % | Optional product available with value of 95% O<sub>2</sub>; ASTM D2868 |

| Optical Properties | Metric | English | Comments |
|---|---|---|---|
| Refractive Index | 1.40<br>@Temperature 25.0 °C, Wavelength 589.3 nm | 1.40<br>@Temperature 77.0 °F, Wavelength 589.3 nm | Sodium D line; ASTM D542 |

| Electrical Properties | Metric | English | Comments |
|---|---|---|---|
| Volume Resistivity | 2.00e+14 ohm-cm | 2.00e+14 ohm-cm | DC, 65% RH; ASTM D257 |
| Dielectric Constant | 4.5 - 5.8<br>@Frequency 1e+8 Hz | 4.5 - 5.8<br>@Frequency 1e+8 Hz | ASTM D150 |
| | 10.9 - 13.5<br>@Frequency 100 Hz | 10.9 - 13.5<br>@Frequency 100 Hz | ASTM D150 |
| Dielectric Strength | 31.5 - 43.3 kV/mm | 800 - 1100 kV/in | ASTM D149 |
| Dissipation Factor | 0.060 - 0.10<br>@Frequency 100 Hz | 0.060 - 0.10<br>@Frequency 100 Hz | ASTM D150 |
| | 0.25 - 0.29<br>@Frequency 1e+8 Hz | 0.25 - 0.29<br>@Frequency 1e+8 Hz | ASTM D150 |

## Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com
Email : sales@lookpolymers.com
Tel : +86 021-51131842
Mobile : +86 13061808058
Skype : lookpolymers
Address : United North Road 215,Fengxian District, Shanghai City,China