**FEP Resin for Wires & Cables**

**Description**
Perfluorinated ethylene-propylene (FEP) for wire and cable is the copolymer of tetrafluoroethylene (TFE) and hexafluoropropylene (HFP) with excellent thermo-stability, outstanding chemical inertness, low friction coefficient, distinctive air aging resistance, vapor penetrating resistance, non-inflammability and superior electrical insulation. It is nearly stabilized in rather wide ranges of temperature and frequency. And it can be widely used as wire and cable in the field of aircraft, spacecraft, communication, computer electricity instrument, high buildings and high temperature up to 200°C for a long time, etc, due to its excellent interruption & shielding resistance to communication signals. The thermoplastic process techniques can be used to fabricate useful products from FEP.

**Specification**

<table>
<thead>
<tr>
<th>Grade</th>
<th>FM-1</th>
<th>FW-1</th>
<th>FW-2</th>
<th>FW-3</th>
<th>FW-4</th>
<th>FW-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clean Semitransparent Granules</td>
<td></td>
<td></td>
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<tr>
<td>Melt Flow Rate, g/10min</td>
<td>0.8-2.0</td>
<td>2.1-4.0</td>
<td>4.1-8.0</td>
<td>8.1-12.0</td>
<td>12.1-20.0</td>
<td>20.1-27.0</td>
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<tr>
<td>Tensile Strength, MPa</td>
<td>≥ 27</td>
<td>25</td>
<td>21</td>
<td>20</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Elongation, %</td>
<td>320</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>280</td>
<td>280</td>
</tr>
<tr>
<td>Melting Point, ℃</td>
<td>260±5</td>
<td>265±10</td>
<td>265±10</td>
<td>265±10</td>
<td>255±10</td>
<td>255±10</td>
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<tr>
<td>S.S.G</td>
<td>2.12-2.17</td>
<td></td>
<td></td>
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<tr>
<td>Volatile, % ≤</td>
<td>0.10</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Thermo-stress cracking resistance</td>
<td>Excellent</td>
<td>Good</td>
<td>Good</td>
<td>Fair</td>
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<tr>
<td>Volume Resistance, Ω.cm</td>
<td>1X10⁸</td>
<td></td>
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<tr>
<td>Breakdown Voltage, kV/mm</td>
<td>20-24</td>
<td></td>
<td></td>
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<tr>
<td>Dielectric Constant, 10⁶ Hz ≤</td>
<td>2.15</td>
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<tr>
<td>Dielectric Loss Tangent, 10⁶ Hz ≤</td>
<td>7.0X10⁻⁸</td>
<td>3.0X10⁻⁸</td>
<td>4.0X10⁻⁸</td>
<td></td>
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<tr>
<td>Applications</td>
<td>Wires and cables requiring resistance to stress cracking</td>
<td>Thick wall wires and cables</td>
<td>General purpose wires and cables</td>
<td>Thin wall wires</td>
<td>Wires by high-speed extrusion</td>
<td>Thin wall wires by high-speed extrusion</td>
</tr>
</tbody>
</table>

**Package**
Packed in a double layer PE bag, and then packed in a cardboard drum. N.W. 20kgs each drum.

**Transportation & Storage**
It should be stored in a clean, cool and dry warehouse. Avoid contamination by dust and moisture. It’s transported as non-hazardous goods.

**Precaution**
The processing temperature mustn’t be over 400°C to avoid toxic analyzed gases that may produce.

Address: Building No.16, 3399 Kangxin Road, Shanghai, China