# PRL PPX-MF-FR1

Polyphenylene Ether + PS

Polymer Resources Ltd.

## Message:

PRL PPX-MF-FR1 is a Polyphenylene Ether + PS (PPE+PS) product filled with mineral. It can be processed by injection molding and is available in North America.
Characteristics include:
RoHS Compliant
Flame Retardant
Halogen Free
Heat Resistant

| General Information | | | |
|---|---|---|---|
| Filler / Reinforcement | Mineral | | |
| Additive | Flame Retardant | | |
| Features | Bromine Free<br>Chlorine Free<br>Flame Retardant<br>Medium Heat Resistance<br>Self Extinguishing | | |
| RoHS Compliance | RoHS Compliant | | |
| Forms | Pellets | | |
| Processing Method | Injection Molding | | |
| **Physical** | **Nominal Value** | **Unit** | **Test Method** |
| Specific Gravity | 1.24 | g/cm³ | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (250°C/11.6 kg) | 15 to 25 | g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow | 0.50 to 0.70 | % | ASTM D955 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Rockwell Hardness (R-Scale) | 121 | | ASTM D785 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Strength | | | ASTM D638 |
| Yield, 3.18 mm | 62.1 | MPa | |
| Break, 3.18 mm | 55.2 | MPa | |
| Tensile Elongation | | | ASTM D638 |
| Yield, 3.18 mm | 7.0 | % | |
| Break, 3.18 mm | 30 | % | |
| Flexural Modulus (3.18 mm) | 2860 | MPa | ASTM D790 |
| Flexural Strength (3.18 mm) | 96.5 | MPa | ASTM D790 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Notched Izod Impact (23°C, 3.18 mm) | 110 | J/m | ASTM D256 |

| Thermal | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Deflection Temperature Under Load | | | ASTM D648 |
| 0.45 MPa, Unannealed, 3.18 mm | 87.8 | °C | |
| 1.8 MPa, Unannealed, 3.18 mm | 82.2 | °C | |
| Vicat Softening Temperature | 116 | °C | ASTM D1525 [1] |
| **Electrical** | **Nominal Value** | **Unit** | **Test Method** |
| Volume Resistivity | 1.0E+16 | ohms·cm | ASTM D257 |
| **Injection** | **Nominal Value** | **Unit** | |
| Drying Temperature | 104 to 110 | °C | |
| Drying Time | 3.0 to 4.0 | hr | |
| Drying Time, Maximum | 8.0 | hr | |
| Rear Temperature | 221 to 271 | °C | |
| Middle Temperature | 232 to 277 | °C | |
| Front Temperature | 243 to 282 | °C | |
| Processing (Melt) Temp | 246 to 282 | °C | |
| Mold Temperature | 65.6 to 82.2 | °C | |
| NOTE | | | |
| 1. | Rate B (120°C/h), Loading 2 (50 N) | | |



## Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China