

XYRON™ 440Z

Asahi Kasei Corporation - Polyphenylene Ether + PS

General Information

| Product Description | |
|--|---|
| Modified PPE Unreinforced Flame retardant V-0 | |
| General | |
| Material Status | <ul style="list-style-type: none"> Commercial: Active |
| Availability | <ul style="list-style-type: none"> Africa & Middle East Asia Pacific Europe North America |
| Additive | <ul style="list-style-type: none"> Flame Retardant |
| Features | <ul style="list-style-type: none"> Flame Retardant Halogen Free |
| Processing Method | <ul style="list-style-type: none"> Injection Molding |
| Part Marking Code (ISO 11469) | <ul style="list-style-type: none"> >PPE+PS-FR(40)< |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|---------------|-----------------------|-----------------|
| Density | 1.10 | g/cm ³ | ISO 1183 |
| Molding Shrinkage ² (0.0787 in) | 0.60 to 0.80 | % | Internal Method |
| Water Absorption (24 hr, 73°F) | 0.10 | % | ISO 62 |
| Outdoor Suitability (Black) | f1 | | UL 746C |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Stress (Yield, 73°F) | 9720 | psi | ISO 527 |
| Nominal Tensile Strain at Break (73°F) | 8.0 | % | ISO 527 |
| Flexural Modulus (73°F) | 392000 | psi | ISO 178 |
| Flexural Stress (73°F) | 15400 | psi | ISO 178 |
| Impact | Nominal Value | Unit | Test Method |
| Charpy Notched Impact Strength ³ (73°F) | 8.1 | ft·lb/in ² | ISO 179 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 219 | °F | ISO 75-2/A |
| CLTE - Flow (-22 to 149°F) | 3.6E-5 | in/in/°F | ISO 11359-2 |
| CLTE - Transverse (-22 to 149°F) | 4.0E-5 | in/in/°F | ISO 11359-2 |
| Heat Deflection Temperature - (1.8 MPa, Unannealed) | 230 | °F | ASTM D648 |
| Electrical | Nominal Value | Unit | Test Method |
| Surface Resistivity | 1.0E+16 | ohms | IEC 60093 |
| Volume Resistivity (73°F) | 1.0E+16 | ohms·cm | IEC 60093 |
| Dielectric Constant (5.20 GHz) | 2.70 | | SPDR |
| Dielectric Constant | | | IEC 60250 |
| 100 Hz | 2.90 | | |
| 1 MHz | 2.90 | | |
| Dissipation Factor (5.20 GHz) | 4.0E-3 | | SPDR |
| Dissipation Factor | | | IEC 60250 |
| 100 Hz | 3.0E-3 | | |
| 1 MHz | 4.0E-3 | | |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating | | | UL 94 |
| 0.030 in | V-0 | | |
| 0.10 in | 5VA | | |

Processing Information

| Injection | Nominal Value | Unit |
|-----------|---------------|------|
|-----------|---------------|------|



| | |
|------------------------------------|---------------|
| Drying Temperature - Hot Air Dryer | 194 to 212 °F |
| Drying Time - Hot Air Dryer | 2.0 to 4.0 hr |
| Processing (Melt) Temp | 464 to 554 °F |
| Mold Temperature | 122 to 176 °F |

Notes

¹ Typical properties: these are not to be construed as specifications.

² 150x150x2 mm

³ 4 mm

