

XYRON™ 641Z

Asahi Kasei Corporation - Polyphenylene Ether + PS

General Information
Product Description

 Modified PPE
 Unreinforced Flame retardant V-0
 Heat resistance High

General

| | |
|-------------------------------|---|
| Material Status | • Commercial: Active |
| Availability | • Africa & Middle East • Europe • Asia Pacific • North America |
| Additive | • Flame Retardant |
| Features | • Flame Retardant • Halogen Free |
| Processing Method | • Injection Molding |
| Part Marking Code (ISO 11469) | • >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) | 0.50 to 0.70 | % | Internal Method |
| Water Absorption (24 hr, 73°F) | 0.10 | % | ISO 62 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Stress (Yield, 73°F) | 10700 | psi | ISO 527-2 |
| Nominal Tensile Strain at Break (73°F) | 9.0 | % | ISO 527-2 |
| Flexural Modulus (73°F) | 387000 | psi | ISO 178 |
| Flexural Stress (73°F) | 16400 | psi | ISO 178 |
| Impact | Nominal Value | Unit | Test Method |
| Charpy Notched Impact Strength ³ (73°F) | 7.1 | ft·lb/in ² | ISO 179 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 266 | °F | ASTM D648 |
| Deflection Temperature Under Load (264 psi, Unannealed) | 261 | °F | ISO 75-2/A |
| CLTE - Flow (-22 to 149°F) | 3.9E-5 | in/in/°F | ISO 11359-2 |
| 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 |
| Electric Strength ⁴ (0.0787 in) | 740 | V/mil | IEC 60243-1 |
| Dielectric Constant | | | IEC 60250 |
| 100 Hz | 2.90 | | |
| 1 MHz | 2.90 | | |
| Dissipation Factor | | | IEC 60250 |
| 100 Hz | 3.0E-3 | | |
| 1 MHz | 4.0E-3 | | |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating | | | UL 94 |
| 0.06 in, ALL | V-0 | | |
| 0.08 in, BK | 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 | 536 to 572 °F |
| Mold Temperature | 122 to 230 °F |

Notes

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

² 150x150x2 mm

³ 4 mm

⁴ Short Time

