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AsahiKASEI Engineering Plastics Information Comprehensive Site
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AsahiKASEI

# XYRON™ 540Z

## Asahi Kasei Corporation - Polyphenylene Ether + PS

Tuesday, February 15, 2022

### General Information

| **Product Description** | | |
|---|---|---|
| Modified PPE | | |
| Unreinforced Flame retardant V-0 | | |
| **General** | | |
| Material Status | • Commercial: Active | |
| Availability | • Africa & Middle East<br>• Asia Pacific | • Europe<br>• North America |
| Additive | • Flame Retardant | |
| Features | • Flame Retardant | |
| Processing Method | • Injection Molding | |
| Part Marking Code (ISO11469) (ISO 11469) | • >PPE+PS-FR(40)< | |

### ASTM & ISO Properties [1]

| **Physical** | **Nominal Value** | **Unit** | **Test Method** |
|---|---|---|---|
| Density | 1.10 | g/cm³ | ISO 1183 |
| Molding Shrinkage [2] (2.00 mm) | 0.60 to 0.80 | % | Internal Method |
| Water Absorption (24 hr, 23°C) | 0.10 | % | ISO 62 |
| Outdoor Suitability (Black) | f1 | | UL 746C |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Stress (Yield, 23°C) | 69.0 | MPa | ISO 527 |
| Nominal Tensile Strain at Break (23°C) | 12 | % | ISO 527 |
| Flexural Modulus (23°C) | 2500 | MPa | ISO 178 |
| Flexural Stress (23°C) | 107 | MPa | ISO 178 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Charpy Notched Impact Strength [3] (23°C) | 19 | kJ/m² | ISO 179 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Deflection Temperature Under Load | | | ISO 75-2/A |
| 1.8 MPa, Unannealed | 112 | °C | |
| CLTE | | | ISO 11359-2 |
| Flow : -30 to 65°C | 6.0E-5 | cm/cm/°C | |
| Transverse : -30 to 65°C | 6.9E-5 | cm/cm/°C | |
| Heat Deflection Temperature - (1.8 MPa, Unannealed) | 120 | °C | ASTM D648 |

Disclaimer:
- Data shown are typical values obtained by proper testing methods and should not be used for specification purpose. Please use these data for selecting the most appropriate grade suitable for specific usage.
  These data may be changed because of improvement in properties.
- Be sure to read the relevant SDS before handling and use, and always follow the Important Precautions.
- Do not use plastics in any of the following orally- or medically-related applications.
- Orally-related applications: any part, device or component which may come into direct oral contact or into direct contact with drinking foods or beverages.
  For drinking water application, please consult Asahi Kasei Corporation.
- Medically-related applications: any part, device or component which may be used intracorporeally or which may in dialysis or other processes come into direct or indirect contact with body tissue, body fluids or transfusion fluids.

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| Electrical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Surface Resistivity | 1.0E+16 | ohms | IEC 60093 |
| Volume Resistivity (23°C) | 1.0E+16 | ohms·cm | IEC 60093 |
| 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 |
| 0.75 mm | V-0 | | |
| 1.5 mm | 5VB | | |
| 2.5 mm | 5VA | | |

## Processing Information

| Injection | Nominal Value | Unit |
|---|---|---|
| Drying Temperature | 90 to 100 | °C |
| Drying Time | 2.0 to 4.0 | hr |
| Processing (Melt) Temp | 240 to 300 | °C |
| Mold Temperature | 50 to 80 | °C |

### Notes

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

[2] 150x150x2 mm

[3] 4 mm

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