

## XYRON™ L544V

Modified Polyphenylene Ether Resin High-Stiffness, Low-Warp, High-Flow Chassis Grade

|                       | Property                                | Units             | Test Method          | Test Condition            | L544V                |
|-----------------------|---|-------------------|----------------------|---------------------------|----------------------|
| Physical              | Specific Gravity                        |                   | ISO 1183             | 23°C                      | 1.43                 |
|                       | Moisture Absorption                     | %                 | ISO 62               | Immersion<br>for 24 hours | 0.06                 |
| Thermal               | Flammability                            |                   | UL 94                |                           | V-1(1.5mm)           |
|                       | Temperature of Deflection               | °C                | ISO 75-1             | 1.80MPa                   | 118                  |
|                       | Under Load(DTUL)                        |                   | ASTM D 648           | 1.82MPa                   | 120                  |
|                       | Coefficient of Linear Thermal Expansion | mm/mm/°C          | ISO 11359            | -30°C~65°C                | 3.0×10 <sup>-5</sup> |
|                       | Moulding Shrinkage                      | %                 | ASAHIKASEI<br>Method | 150×150×2mm               | 0.10-0.40            |
| Electrical            | Dielectric Constant                     |                   | IEC 60250            | 100Hz                     | 3.4                  |
|                       | Dielectric Coristant                    |                   | 120 00230            | 1MHz                      | 3.3                  |
|                       | Dissipation Factor                      |                   | IEC 60250            | 100Hz                     | 0.0070               |
|                       | ·                                       |                   |                      | 1MHz                      | 0.0090               |
|                       | Volume Resistivity                      | Ohm-cm            | IEC 60093            | 23°C 50% RH               | 10 <sup>16</sup>     |
|                       | Surface Resistivity                     | Ohm               | IEC 60093            | 23°C 50% RH               | 10 <sup>16</sup>     |
|                       | Dielectric Strength                     | kV/mm             | IEC 60243            | Short time. 2mm           |                      |
| Mechanical            | Tensile Strength                        | MPa               | ISO 527              | 23°C 50% RH               | 84                   |
|                       | (Nominal) Tensile Strain                | %                 | ISO 527              | 23°C 50% RH               | 2                    |
|                       | Flexural Strength                       | MPa               | ISO 178              | 23°C 50% RH               | 143                  |
|                       | Flexural Modulus                        | MPa               | ISO 178              | 23°C 50% RH               | 8840                 |
|                       | Charpy Impact Strength                  | KJ/m <sup>2</sup> | ISO 179              | 4mm 23°C(Notched)         | 5                    |
| Molding<br>Conditions | Resin Temperature                       | °C                |                      |                           | 250-300              |
|                       | Mold Temperature                        | °C                |                      |                           | 70-90                |
|                       | Pre-Drying Temperature                  | °C                |                      |                           | 90-100               |
|                       | Pre-Drying Time                         | Hr                |                      |                           | 2-4                  |
|                       | Remark                                  |                   |                      |                           | Filler 40%           |

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.

Do not use  $\mathsf{XYRON}^\mathsf{TM}$  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 Chemicals Corporation.
- Medically-related applications: any part, 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.