

Technical Data Sheet

GPPS(General Purpose Poly Styrene) GP 150K

Features High transparency, High strength
Applications Vegetable container of refrigerator, Humidifier, Lighting equipment

| Physical | Test Method | Value |
|------------------------------|-------------|------------------------|
| Density | ASTM D792 | 1.04 g/cm ³ |
| Melt Flow Index (200°C, 5kg) | ASTM D1238 | 3.0 g/10min |
| Mold Shrinkage | ASTM D955 | 0.3 ~ 0.6 % |
| Water absorption | ASTM D570 | 0.03 % |

| Mechanical | Test Method | Value |
|-----------------------------|-------------|--|
| Tensile Strength | ASTM D638 | 540 kg/cm ² (7,668) (psi) |
| Elongation | ASTM D638 | 3.5 % |
| Flexural Strength | ASTM D790 | 890 kg/cm ² (12,638) (psi) |
| Flexural Modulus | ASTM D790 | 33,000 kg/cm ² (468,600) (psi) |
| Izod Impact Strength(3.2mm) | ASTM D256 | 1.5 kgcm/cm (0.28) (ft-lb/in) |
| Rockwell Hardness(M scale) | ASTM D785 | 75 |

| Thermal | Test Method | Value |
|---|-------------|----------------------|
| Heat Deflection Temperature(18.6kgf/cm ²) | ASTM D648 | 92 °C (198) (°F) |
| Vicat Softening Temperature(1kg, 50°C/h) | ASTM D1525 | 105 °C (221) (°F) |

| Flammability | Test Method | Value |
|---------------------------|-------------|-------|
| Flame Rating - UL (1.6mm) | UL 94 | HB |

Notes

These are just typical properties, not specifications. Users should confirm results by their own test.

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Processing guide

| Injection Guide | Unit | Value |
|-----------------|------|---------|
| Nozzle | °C | 190~220 |
| Front | °C | 190~210 |
| Middle | °C | 180~200 |
| Rear | °C | 170~190 |
| Hopper Throat | °C | 45 |
| Mold | °C | 40~70 |

| Drying | Unit | Value |
|-------------|------|-------|
| Temperature | °C | 60~70 |
| Time | hr | 1~3 |

Notes

These are only mentioned as general guidelines.

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