# Styrolution PS 147F

General Purpose Polystyrene

INEOS Styrolution Group GmbH

## Message:

Styrolution PS 147F is a highly transparent GPPS grade. It gives excellent mechanical and heat resistance properties while providing with easy processability and short cycle time.

| General Information | |
|---|---|
| Features | Fast Molding Cycle<br>General Purpose<br>Good Processability<br>High Heat Resistance<br>Medium Flow |
| Uses | Containers<br>Household Goods<br>Packaging<br>Stationary Supplies |
| Appearance | Clear/Transparent |
| Forms | Pellets |
| Processing Method | Extrusion<br>Injection Molding |

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density | 1.05 | g/cm³ | ISO 1183 |
| Melt Volume-Flow Rate (MVR) (200°C/5.0 kg) | 6.50 | cm³/10min | ISO 1133 |
| Molding Shrinkage | 0.30 to 0.60 | % | ISO 294-4 |
| Water Absorption | | | ISO 62 |
| Saturation, 23°C | < 0.10 | % | |
| Equilibrium, 23°C, 50% RH | < 0.10 | % | |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Ball Indentation Hardness | 150 | MPa | ISO 2039-1 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus | 3300 | MPa | ISO 527-2 |
| Tensile Stress (Yield, 23°C) | 50.0 | MPa | ISO 527-2 |
| Tensile Strain (Break, 23°C) | 3.0 | % | ISO 527-2 |
| Flexural Stress | 98.0 | MPa | ISO 178 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Charpy Notched Impact Strength (23°C) | 3.0 | kJ/m² | ISO 179 |

| | | | |
|---|---|---|---|
| Charpy Unnotched Impact Strength (23°C) | 17 | kJ/m² | ISO 179 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Heat Deflection Temperature | | | |
| 0.45 MPa, Annealed | 93.0 | °C | ISO 75-2/B |
| 1.8 MPa, Annealed | 85.0 | °C | ISO 75-2/A |
| Vicat Softening Temperature | | | |
| -- | 100 | °C | ISO 306/A50 |
| -- | 95.0 | °C | ISO 306/B50 |
| **Electrical** | **Nominal Value** | **Unit** | **Test Method** |
| Surface Resistivity | > 1.0E+14 | ohms | IEC 60093 |
| Volume Resistivity | > 1.0E+18 | ohms·cm | IEC 60093 |
| Electric Strength [1] (1.50 mm) | 140 | kV/mm | IEC 60243-1 |
| Relative Permittivity | | | IEC 60250 |
| 100 Hz | 2.50 | | |
| 1 MHz | 2.50 | | |
| **Injection** | **Nominal Value** | **Unit** | |
| Processing (Melt) Temp | 180 to 260 | °C | |
| Mold Temperature | 10.0 to 60.0 | °C | |
| Injection Velocity | 200 | mm/sec | |
| **NOTE** | | | |
| 1. | Short Time | | |



## Recommended distributors for this material

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