

NAME: GPPS1540

Product Description:

GPPS1540 is an easy flowing crystal polystyrene designed for extrusion or injection applications. In extrusion, it improves extruder output and thermoforming cycle times when mixed with a super high impact polystyrene such as HIPS7240. It is particularly suitable for glossy-layer co-extrusion. It does combine excellent fluidity with a higher softening point than GPPS1810/1811 grade.

Applications:

Extrusion: Impact dilution; Gloss layer in co-extrusion; Anionic styrene butadiene copolymer dilution.

Injection: Packaging articles; Medical applications, e.g., Petri dishes; Office equipment; Pen barrels; Crisper boxes for refrigerators; Cups.

Typical Data: (Table)

| Property | Unit | Value | Method |
|--------------------------|----------|-----------|--------------|
| MFI (200 °C /5kg) | g/10 min | 11 | ASTM D 1238 |
| Styrene residual monomer | PPM | <500 | CLGLABPSG004 |
| Vicat softening point | °C | Min89.5 | ASTM D 1525 |
| Rockwell hardness | - | Scale L70 | ASTM D 785 |
| Tensile strength @ yield | MPa | | ASTM D 638 |
| Tensile strength @ break | MPa | 45 | ASTM D 638 |
| Elongation @ break | % | 2 | ASTM D 638 |
| Flexural modulus | MPa | 3000 | ASTM D 790 |
| Tensile modulus | - | 3100 | ASTM D 638 |
| Refractive index | - | 1.591 | ISO Method |
| Water absorption | % | <0.1 | ASTM D 570 |





Density of this grade is approximately:

1.04 gr/cm³ Shrinkage of all grades in mold is approximately: (0.4-0.7%) (ASTM D 955) All tests are carried out at 23 C unless otherwise stated. The above data are typical laboratory average. They are intended to serve as guides only.

Processing Conditions:

GPPS1540 can be processed under different conditions depending on machinery available and articles molded. During processing of GPPS1540 small quantities of styrene monomer may be released into the atmosphere.

At styrene concentrations of 50 up to 100 PPM (TLV value for styrene monomer), no negative effects on health are expected.

