

SKYPEL G163D

DESCRIPTION

SKYPEL G163D is a thermoplastic polyester elastomer resin with a medium 63D hardness based on shore D scale is widely used for injection molding and extrusion applications.

Physical properties

| Properties | ASTM No | Units | G163D |
|--|---------|---------------------|-------|
| Hardness | D2240 | Shore D | 63 |
| Specific Gravity | D792 | - | 1.21 |
| Water Absorption, 24hr | D570 | % | 0.3 |
| Mold Shrinkage | D955 | % | 1.5 |
| Tensile Stress at 5% Strain ¹⁾ | D638 | kgf/cm ² | 110 |
| Tensile Stress at 10% Strain ¹⁾ | D638 | kgf/cm ² | 175 |
| Tensile Stress at Break ¹⁾ | D638 | kgf/cm ² | 440 |
| Elongation at Break ¹⁾ | D638 | % | 500 |
| Flexural Modulus ²⁾ | D790 | kgf/cm ² | 3200 |
| Tear Strength ³⁾ | D1004 | kN/m | 180 |
| Izod Impact Strength / Notched ⁴⁾ | D256 | kg-cm/cm | N.B. |
| Resilience ⁵⁾ | D2632 | % | 53 |
| Melting Point ⁶⁾ | D3418 | °C | 212 |
| Heat Distortion Temperature ⁷⁾ | D648 | °C | 130 |
| Melt Flow Rate | D1238 | g/10min | 14 |
| - Temperature, °C / 2.16kg | | °C | 230 |

1) ASTM Type IV dumbbells diecut from injection molded slab 2mm thick. Crosshead speed 50mm/min.

2) Crosshead speed 1.3mm/min.

3) Specimens 2mm thick. Crosshead speed 51mm/min.

4) Specimens 6.35mm thick. 'N.B.' means 'not broken'

5) Vertical rebound.

6) Differential Scanning Calorimeter (DSC), peak of endotherm. Heating rate 10°C/min.

7) Load 4.6kg/cm².

PROCESSING

SKYPEL G163D should be sufficiently dried prior to processing. For effective drying using dehumidifying dryer, it should be held for 2 to 3 hours at 100 °C or overnight at least 70 °C. Pre-dried SKYPEL G163D in aluminum bag is also available for your convenience upon your choice.

General purpose processing condition

| Process condition | | | | G163D |
|-------------------|----------|--------|----|-------|
| Injection | Cylinder | Rear | °C | 220 |
| | | Center | | 230 |
| | | Front | | 230 |
| | Nozzle | | °C | 235 |
| | Mold | | °C | 40 |
| Extrusion | Cylinder | Rear | °C | 210 |
| | | Center | | 220 |
| | | Front | | 225 |
| | Die | | °C | 225 |
| | Melt | | °C | 230 |

All data reported here are believed to be correct. However, this should not be accepted as a guarantee of their accuracy.