Retpol® 3083 HS

Polypropylene

PolyPacific Pty. Ltd.

Message:

Extron 3083 HS is a 50% glass fibre reinforced coupled polypropylene compound. It is a medium flow injection moulding grade developed for components requiring very high rigidity and excellent creep resistance with high heat deflection temperatures and good impact strength. It has been stabilized to meet automotive heat aging requirements of 21days at 150°C.

| General Information | | | | |
|--|----------------------------------|----------|-------------|--|
| Filler / Reinforcement | Glass Fiber,50% Filler by Weight | | | |
| Additive | Heat Stabilizer | | | |
| Features | Chemically Coupled | | | |
| | Good Creep Resistance | | | |
| | Good Impact Resistance | | | |
| | Heat Stabilized | | | |
| | High Rigidity | | | |
| | Medium Flow | | | |
| Uses | Automotive Applications | | | |
| Forms | Granules | | | |
| Processing Method | Injection Molding | | | |
| Physical | Nominal Value | Unit | Test Method | |
| Specific Gravity | 1.35 | g/cm³ | ASTM D792 | |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 | | | | |
| kg) | 5.0 | g/10 min | ASTM D1238 | |
| Molding Shrinkage - Flow (3.00 mm) | 0.10 to 0.40 | % | ASTM D955 | |
| Hardness | Nominal Value | Unit | Test Method | |
| Rockwell Hardness (R-Scale, 3.00 mm) | 110 | | ASTM D785 | |
| Durometer Hardness | | | ASTM D2240 | |
| Shore D, 3.00 mm | 84 | | | |
| Shore D, 15 sec, 3.00 mm | 80 | | | |
| Mechanical | Nominal Value | Unit | Test Method | |
| Tensile Strength ¹ (3.00 mm) | 125 | MPa | ASTM D638 | |
| Tensile Elongation ² (Break, 3.00 mm) | 2.0 | % | ASTM D638 | |
| Flexural Modulus (3.00 mm) | 11000 | МРа | ASTM D790 | |
| Impact | Nominal Value | Unit | Test Method | |
| Notched Izod Impact (3.00 mm) | 110 | J/m | ASTM D256 | |
| Unnotched Izod Impact (3.00 mm) | 680 | J/m | ASTM D256 | |
| Thermal | Nominal Value | Unit | Test Method | |
| Deflection Temperature Under Load | | | ASTM D648 | |
| 0.45 MPa, Unannealed, 3.00 mm | 160 | °C | | |
| | | | | |

| 1.8 MPa, Unannealed, 3.00 mm | 154 | °C | |
|------------------------------------|---------------|----------|-----------|
| CLTE - Flow (-30 to 30°C, 3.00 mm) | 3.0E-5 | cm/cm/°C | ASTM D696 |
| Injection | Nominal Value | Unit | |
| Drying Temperature | 100 to 120 | °C | |
| Drying Time | 2.0 to 4.0 | hr | |
| Suggested Max Regrind | 10 | % | |
| Processing (Melt) Temp | 200 to 260 | °C | |
| Mold Temperature | 20.0 to 60.0 | °C | |
| Injection Rate | Moderate | | |
| NOTE | | | |
| 1. | 50 mm/min | | |
| 2. | 50 mm/min | | |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533 Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

