

Solvay Specialty Polymers Amodel® A-1133 NL WH 505 Polyphthalamide (PPA) (Unverified Data**)

Category : Polymer , Thermoplastic , Polyphthalamide (PPA) , Polyphthalamide (PPA), 30% Glass Fiber Reinforced

Material Notes:

Amodel A-1133 NL resin is a 33% glass reinforced polyphthalamide (PPA) which is distinguished by its high-reflectivity white color. This grade features a high deflection temperature for compatibility with SMT processes, and low moisture absorption. - White: A-1133 NL WH 505
 Injection Notes: A general purpose screw is recommended, with minimum back pressure. Information provided by Solvay Specialty Polymers.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Amodel-A-1133-NL-WH-505-Polyphthalamide-PPA-nbspUnverified-Data.php

| Physical Properties | Metric | English | Comments |
|-----------------------------------|---------------------------|---------------------------|---------------------------|
| Density | 1.54 g/cc | 0.0556 lb/in ³ | ISO 1183/A |
| Filler Content | 33 % | 33 % | Glass Fiber Reinforcement |
| Water Absorption | 0.16 % @Time 86400 sec | 0.16 % @Time 24.0 hour | ASTM D570 |
| Linear Mold Shrinkage, Flow | 0.0020 cm/cm | 0.0020 in/in | ASTM D955 |
| Linear Mold Shrinkage, Transverse | 0.0060 cm/cm | 0.0060 in/in | ASTM D955 |

| Mechanical Properties | Metric | English | Comments |
|---------------------------|------------|----------------|--------------------|
| Hardness, Rockwell R | 125 | 125 | R-Scale; ASTM D785 |
| Tensile Strength at Break | 179 MPa | 26000 psi | ASTM D638 |
| Elongation at Break | 1.8 % | 1.8 % | ASTM D638 |
| Tensile Modulus | 12.4 GPa | 1800 ksi | ASTM D638 |
| Flexural Yield Strength | 236 MPa | 34200 psi | ASTM D790 |
| Flexural Modulus | 11.7 GPa | 1700 ksi | ASTM D790 |
| Poissons Ratio | 0.41 | 0.41 | ASTM E132 |
| Shear Modulus | 4.40 GPa | 638 ksi | Calculated |
| Izod Impact, Notched | 0.370 J/cm | 0.693 ft-lb/in | ASTM D256 |

| Thermal Properties | Metric | English | Comments |
|--------------------|--------------|----------------|----------|
| | 14.0 μm/m-°C | 7.78 μin/in-°F | |

| CTE, linear, Parallel to Flow Thermal Properties | Metric @ Temperature 160 - 249 °C | English @ Temperature 320 - 480 °F | TMA; ASTM E831 Comments |
|---|---|--|----------------------------|
| | 23.0 µm/m-°C | 12.8 µin/in-°F | TMA; ASTM E831 |
| | @Temperature 0.000 - 100 °C | @Temperature 32.0 - 212 °F | |
| CTE, linear, Transverse to Flow | 4.50 µm/m-°C | 2.50 µin/in-°F | ASTM E831 |
| | @Temperature 0.000 - 100 °C | @Temperature 32.0 - 212 °F | |
| | 100 µm/m-°C | 55.6 µin/in-°F | ASTM E831 |
| | @Temperature 160 - 249 °C | @Temperature 320 - 480 °F | |
| Melting Point | 310 °C | 590 °F | ASTM D570 |
| Deflection Temperature at 1.8 MPa (264 psi) | 271 °C | 520 °F | Unannealed; ASTM D648 |

| Processing Properties | Metric | English | Comments |
|--------------------------|--------------|--------------|----------|
| Rear Barrel Temperature | 304 - 318 °C | 579 - 604 °F | |
| Front Barrel Temperature | 316 - 329 °C | 601 - 624 °F | |
| Melt Temperature | 321 - 343 °C | 610 - 649 °F | |
| Mold Temperature | 135 °C | 275 °F | |
| Drying Temperature | 120 °C | 248 °F | |
| Dry Time | 4.00 hour | 4.00 hour | |
| Moisture Content | 0.045 % | 0.045 % | |

| Descriptive Properties | Value | Comments |
|---------------------------|--------------------------|----------|
| Appearance | White | |
| Automotive Specifications | ASTM D6779 PA128G35 | |
| Availability | Africa & Middle East | |
| | Asia Pacific | |
| | Europe | |
| | North America | |
| | South America | |
| Features | Good Chemical Resistance | |

| Descriptive Properties | Value | Comments |
|------------------------|-------------------------|----------|
| | Good Color Stability | |
| | High Reflectivity | |
| | Low Moisture Absorption | |
| Forms | Pellets | |
| Generic | PPA | |
| Processing Method | Injection Molding | |
| Uses | Automotive Electronics | |
| | Housings | |
| | LEDs | |

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China