

Nylene® 206 HS UV

TECHNICAL DATASHEET

TDS Ref # 849 Reviewed: 1/28/2015

DESCRIPTION

• Nylene 206 HS UV is a heat and light stabilized medium viscosity nylon 6 molding resin used extensively in automotive applications.

| PROPERTIES | TEST METHOD | UNIT | VALUE |
|------------------------------|-------------|--------------------------------|----------------|
| PHYSICAL PROPERTIES | | | |
| Specific Gravity | D792 | n/a | 1.13 |
| MECHANICAL PROPERTIES | | | |
| Flexural Modulus | D790 | psi (MPa) | 341,000 (2350) |
| Notched Izod Impact | D256 | ft-lbf/in (kJ/m ²) | 1.5 (79) |
| Tensile Modulus | D638 | psi (MPa) | 405,000 (2790) |
| Tensile Strength | D638 | psi (MPa) | 10,300 (70) |
| THERMAL PROPERTIES | | | |
| Melt Point | D3418 | °F (°C) | 420 (215) |

NOTES

• Testing conducted on dry-as-molded specimens at 73°F

PROCESSING CONSIDERATIONS: PA 6 UNREINFORCED

| | | | |
|----------|-------------|----------------------|--|
| °F (°C) | Rear Zone | 430-475 (221-249) | Melt Temperature: Melt Temperature: Nylene® PA6 melts at 428°F, (220°C) actual melt temperatures of 440-560°F (227-293°C) are permissible, depending on residence time and shot size. Mold Temperature: 120-200°F (49-93°C), highly filled grades require 180-200°F (82-93°C) to obtain the best overall surface appearance, higher temperatures will increase crystallinity. Residence Time: should not exceed 6 minutes if possible, less with higher melt temperatures Shot Size: should be between 25-75% of barrel capacity. Fill Rate: fast fill rates are suggested for best surface appearance. Regrind Level: typically no more than 25% is recommended, with higher levels possible for unfilled grades depending on the end use requirements. Make certain regrind is properly dried to virgin moisture levels. Drying Temperature: 150-180°F (66-82°C) for 2-4 hours, Nylene® PA6 should be dried to less than 0.20% moisture for optimum performance. Drying longer than 4 hours or at higher temperatures may cause discoloration of the polymer or adversely affect important physical properties. |
| | Center Zone | 440-500 (227-260) | |
| | Front Zone | 460-520 (238-271) | |
| | Nozzel | 460-520 (238-271) | |
| PRESSURE | Melt Temp. | 460-520 (238-271) | |
| | Injection | 4-12,000 | |
| | Hold | 3-9,000 | |
| | Back | 0-50 | |

CHARACTERISTICS

Resin Type: Nylon 6
 Product Characteristics:
 Unreinforced, Heat Stabilized, Heat Stabilized

INJECTION MOLDING PROCESSING

Prime Grade

MARKETS USED

- Automotive Applications
- General Applications
- Industrial Applications
- Tool & Appliance
- Consumer Goods

APPLICATIONS

- Clips
- Engineered Parts
- Fasteners
- Fittings
- Gears
- Spacers

DISCLAIMER

The data set forth herein has been carefully compiled by Nylene in our laboratories. Values shown are typical properties and not specifications. Since processing variables will affect properties, the reproducibility of our data in a customer's testing facility is not guaranteed. There is no warranty of any kind, either expressed or implied, applicable to the use of this information, and the user assumes all risk and liability in connection therewith.



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