

## Technical Information



# PULSE™ A35-105 PC/ABS Engineering Resin

## Overview

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PULSE™ A35-105 PC/ABS resin delivering optimized performance for automotive interior component applications.

### Benefits

- High-impact strength even at low temperature
- High Heat resistance for demanding automotive interior components
- Consistent natural white color produces high quality part appearance when used with color concentrates (self coloring) or Trinseo Color Masterbatch Technology
- Low odor & VOC to meet all global Automotive OEM specifications

### Applications

- Mid (floor)consoles
- Instrument Panel components
- Door panel trim
- Pillars
- Storage / load floors / glove box

### Automotive Specifications

- BMW GS 93016
- GM QK 002412 Color: Natural
- JLR STJLR.51.353
- JLR STJLR.51.5262
- VAG VW-TL 52013 A
- VOLVO STD 1212,86
- DAIMLER DBL 5404.28
- GM QK 002432
- JLR STJLR.51.5229
- PSA Peugeot-Citroën ABS/PC-0001
- VOLKSWAGEN TL 522 31-A

| Physical                                 | Nominal Value (English)   | Nominal Value (SI)        | Test Method  |
|------------------------------------------|---------------------------|---------------------------|--------------|
| Density                                  | 1.12 g/cm <sup>3</sup>    | 1.12 g/cm <sup>3</sup>    | ISO 1183     |
| Apparent (Bulk) Density                  | 0.65 g/cm <sup>3</sup>    | 0.65 g/cm <sup>3</sup>    | ISO 60       |
| Melt Mass-Flow Rate (MFR) (260°C/5.0 kg) | 17 g/10 min               | 17 g/10 min               | ISO 1133     |
| Spiral Flow <sup>1</sup>                 | 16.5 in                   | 42.0 cm                   |              |
| Molding Shrinkage                        | 4.0E-3 to 7.0E-3 in/in    | 0.40 to 0.70 %            | ISO 294-4    |
| VOC Content                              | 12.0 µg/g                 | 12.0 µg/g                 | VDA 277      |
| Mechanical                               | Nominal Value (English)   | Nominal Value (SI)        | Test Method  |
| Tensile Modulus                          | 305000 psi                | 2100 MPa                  | ISO 527-1/1  |
| Tensile Stress (Yield)                   | 6960 psi                  | 48.0 MPa                  | ISO 527-2/50 |
| Tensile Strain (Break)                   | 100 %                     | 100 %                     | ISO 527-2/50 |
| Flexural Modulus <sup>2</sup>            | 312000 psi                | 2150 MPa                  | ISO 178      |
| Impact                                   | Nominal Value (English)   | Nominal Value (SI)        | Test Method  |
| Charpy Notched Impact Strength           |                           |                           | ISO 179/1eA  |
| -22°F (-30°C)                            | 21 ft·lb/in <sup>2</sup>  | 45 kJ/m <sup>2</sup>      |              |
| 73°F (23°C)                              | 24 ft·lb/in <sup>2</sup>  | 50 kJ/m <sup>2</sup>      |              |
| Thermal                                  | Nominal Value (English)   | Nominal Value (SI)        | Test Method  |
| Deflection Temperature Under Load        |                           |                           | ISO 75-2/A   |
| 264 psi (1.8 MPa), Unannealed            | 221 °F                    | 105 °C                    |              |
| Vicat Softening Temperature              | 252 °F                    | 122 °C                    | ISO 306/B50  |
| CLTE - Flow (-22 to 176°F (-30 to 80°C)) | 4.2E-5 to 4.4E-5 in/in/°F | 7.5E-5 to 8.0E-5 cm/cm/°C | ISO 11359-2  |

| Injection              | Nominal Value (English) | Nominal Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 212 °F                  | 100 °C             |
| Drying Time            | 4.0 hr                  | 4.0 hr             |
| Processing (Melt) Temp | 491 to 536 °F           | 255 to 280 °C      |
| Mold Temperature       | 140 to 176 °F           | 60 to 80 °C        |

**Notes**

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

<sup>1</sup> Melt Temperature: 500°F (260°C), Injection Pressure: 2.61E+4 psi (1.80E+3 bar)

<sup>2</sup> 0.079 in/min (2.0 mm/min)

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