

# Achieve™ Advanced PP8285E1

## Polypropylene Impact Copolymer

### Product Description

A high crystallinity, high impact copolymer resin designed for injection molded applications requiring excellent processing attributes.

### General

|                           |  |   |                           |
|---------------------------|--|---|---------------------------|
| Availability <sup>1</sup> | ▪ Asia Pacific   | ▪ North America                                 |                           |
| Features                  | ▪ Balanced Stiffness/Toughness<br>▪ Good Impact Resistance | ▪ Good Processability<br>▪ Heat Aging Resistant | ▪ Nucleated               |
| Uses                      | ▪ Appliance Components                                     | ▪ Automotive Applications                       | ▪ Industrial Applications |
| Appearance                | ▪ Natural Color  |   |                           |
| Form(s)                   | ▪ Pellets  |   |                           |
| Processing Method         | ▪ Compounding  | ▪ Injection Molding                             |                           |
| Revision Date             | ▪ 01/01/2017   |   |                           |

| Physical                                  | Typical Value (English) | Typical Value (SI)      | Test Based On     |
|---|-------------------------|-------------------------|-------------------|
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 30 g/10 min             | 30 g/10 min             | ASTM D1238        |
| Density                                   | 0.900 g/cm <sup>3</sup> | 0.900 g/cm <sup>3</sup> | ExxonMobil Method |

| Mechanical  | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|--------------------|---------------|
| Tensile Strength at Yield<br>2.0 in/min (51 mm/min)       | 2940 psi                | 20.3 MPa           | ASTM D638     |
| Tensile Stress at Yield                                   | 2890 psi                | 19.9 MPa           | ISO 527-2     |
| Elongation at Yield                                       | 5.7 %                   | 5.7 %              | ASTM D638     |
| Tensile Strain at Yield                                   | 5.0 %                   | 5.0 %              | ISO 527-2     |
| Flexural Modulus - 1% Secant<br>0.051 in/min (1.3 mm/min) | 144000 psi              | 993 MPa            | ASTM D790A    |
| 0.51 in/min (13 mm/min)                                   | 164000 psi              | 1130 MPa           | ASTM D790B    |
| Flexural Modulus<br>(0.079 in/min (2.0 mm/min))           | 148000 psi              | 1020 MPa           | ISO 178       |

| Impact  | Typical Value (English)   | Typical Value (SI)    | Test Based On |
|---|---------------------------|-----------------------|---------------|
| Notched Izod Impact<br>0°F (-18°C)                                  | 1.7 ft-lb/in              | 89 J/m                | ASTM D256A    |
| 73°F (23°C)   | No Break                  | No Break              |               |
| Notched Izod Impact Strength<br>-4°F (-20°C)                        | 3.2 ft-lb/in <sup>2</sup> | 6.8 kJ/m <sup>2</sup> | ISO 180/1A    |
| 73°F (23°C)   | 22 ft-lb/in <sup>2</sup>  | 46 kJ/m <sup>2</sup>  |               |
| Gardner Impact<br>-20°F (-29°C), 0.125 in (3.18 mm),<br>Geometry GC | 292 in-lb                 | 33.0 J                | ASTM D5420    |

| Thermal   | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|--------------------|---------------|
| Heat Deflection Temperature (0.45 MPa)                            | 181 °F                  | 82.8 °C            | ISO 75-2/B    |
| Deflection Temperature Under Load (DTUL)<br>at 66psi - Unannealed | 198 °F                  | 92.0 °C            | ASTM D648     |

### Legal Statement

This product, including the product name, shall not be used or tested in any medical application without the prior written acknowledgement of ExxonMobil Chemical as to the intended use. For detailed Product Stewardship information, please contact Customer Service.

This product is not intended for use in food contact application.

### Notes

Typical properties: these are not to be construed as specifications.

Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

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For additional technical, sales and order assistance: [www.exxonmobilchemical.com/ContactUs](http://www.exxonmobilchemical.com/ContactUs)

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