

ExxonMobil™ PP1074KNE1

Polypropylene Homopolymer

Product Description

A nucleated, medium melt flow rate homopolymer resin with mold release and anti-static properties. It is suitable for general purpose injection molding.

General

| | | | |
|---------------------------|---|--|--|
| Availability ¹ | ▪ North America | | |
| Features | ▪ Autoclave Sterilizable ▪ Creep Resistant | ▪ Ethylene Oxide Sterilizable ▪ Good Mold Release | ▪ Good Stiffness ▪ Steam Sterilizable |
| Uses | ▪ Bottles ▪ Caps | ▪ Closures ▪ Consumer Applications | ▪ Packaging |
| Appearance | ▪ Natural Color | | |
| Form(s) | ▪ Pellets | | |
| Processing Method | ▪ Injection Molding | | |
| Revision Date | ▪ 10/01/2017 | | |

| Physical | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|-------------------------|-------------------|
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 20 g/10 min | 20 g/10 min | ASTM D1238 |
| Density | 0.900 g/cm ³ | 0.900 g/cm ³ | ExxonMobil Method |

| Mechanical | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|--------------------|---------------|
| Tensile Strength at Yield 2.0 in/min (51 mm/min) | 5550 psi | 38.3 MPa | ASTM D638 |
| Elongation at Yield (2.0 in/min (51 mm/min)) | 8.1 % | 8.1 % | ASTM D638 |
| Flexural Modulus - 1% Secant 0.051 in/min (1.3 mm/min) | 262000 psi | 1810 MPa | ASTM D790A |
| 0.51 in/min (13 mm/min) | 298000 psi | 2050 MPa | ASTM D790B |

| Impact | Typical Value (English) | Typical Value (SI) | Test Based On |
|-------------------------------------|-------------------------|--------------------|---------------|
| Notched Izod Impact -4°F (-20°C) | 0.36 ft·lb/in | 19 J/m | ASTM D256A |
| 73°F (23°C) | 0.59 ft·lb/in | 31 J/m | |

| Thermal | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|--------------------|---------------|
| Deflection Temperature Under Load (DTUL) at 66psi - Unannealed | 248 °F | 120 °C | ASTM D648 |

| Hardness | Typical Value (English) | Typical Value (SI) | Test Based On |
|-------------------|-------------------------|--------------------|---------------|
| Rockwell Hardness | 109 | 109 | ASTM D785 |

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.

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

Notes

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

¹ 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

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